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Agency Director

COMMONWEALTH of VIRGINIA
Department of Information Technology
Acquisition Services Division
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March 30, 2001

Dear Vendor:

You are invited to submit a proposal in accordance with the requirements set forth in the attached Request for Proposals (RFP). This RFP is issued by the Department of Information Technology (DIT). The Commonwealth requests proposals from vendors wishing to propose an Automated Tape Library solution for the DIT DataCenter.

The original proposal, signed by your contractually binding authority, with four (4) additional copies, must be received by the Issuing Office not later than 4:00 p.m. April 26, 2001.

All questions regarding this Request for Proposals (RFP), and the content herein, must be submitted in writing, no later than April 16th. All questions received and the appropriate responses will be posted promptly on the ASD website (<http://asd.state.va.us>). Verbal questions will not be accepted or relied to. Questions may be submitted to the Issuing Office by mail, courier or facsimile. The address is:

Commonwealth of Virginia
Department of Information Technology
110 South Seventh Street - Lobby Floor
Richmond, Virginia 23219
Attention: J. B. Edmonds
Fax: (804) 371-5969

The Commonwealth will not pay for the information requested and reserves the right to reject any and all proposals received.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul H. Dodson".

Paul H. Dodson, Director
Acquisition Services Division

Attachment: RFP 2001-25



COMMONWEALTH OF VIRGINIA
DEPARTMENT OF INFORMATION TECHNOLOGY
REQUEST FOR PROPOSALS
FOR AN
AUTOMATED TAPE LIBRARY SOLUTION
RFP 2001-25
ISSUED
MARCH 30, 2000

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SECTION 1: PROPOSAL ADMINISTRATION PROCEDURES

1.1 Purpose:

The purpose of this Request for Proposals (RFP) is to solicit sealed proposals to establish a contract through competitive negotiations for purchase of tape hardware and software, including one or more automatic tape libraries, a virtual tape system, high-capacity tape drives, standalone 3490E drives, and high-capacity cartridges. This hardware and software will replace all of the existing tape hardware on the MVS system except for the existing 3420 and 3480 tape drives.

1.2 Scope:

This document contains the instructions governing the proposal to be submitted; the format in which proposals are to be submitted, and the material to be submitted therein; project requirements; evaluation criteria; and contractual terms and conditions.

1.3 Issuing Office:

Commonwealth of Virginia
Department of Information Technology
110 South Seventh Street – East Lobby Level
Richmond, Virginia 23219
Attention: J. B. Edmonds

1.4 Issuing Date:

This request is being issued March 30, 2001.

1.5 Closing Date and Time:

The original and seven (7) copies of the technical proposal must be submitted under separate cover and must contain the full name and address of every company bearing an interest in the proposal. The original technical proposal and cost proposal (**only one copy of the cost proposal is required**) must be signed by the vendor's contractually binding authority. The cost proposal must be submitted in a separate clearly marked and sealed package. **NOTE: IT IS NOT ACCEPTABLE TO MARK AN ENTIRE DOCUMENT AS PROPRIETARY. IT IS ALSO UNACCEPTABLE TO MARK THE COST PROPOSAL AS PROPRIETARY.** Offerors are referred to the Commonwealth of Virginia Vendor's Manual, section 1.9 for clarification. All proposals must be received not later than 4:00 p.m. local time, April 26, 2001.

1.6 Rules Regarding Late Proposals and Modifications:

No proposal or modifications to a proposal will be accepted after the closing date and time. Vendors may use any means of delivery but it is the responsibility of the vendor to allow adequate time for delivery to the appropriate office. Proposals and modifications received after closing will be returned unopened.

1.7 Registered Vendors:

PROPOSALS WILL NOT BE CONSIDERED IF THE VENDOR IS NOT REGISTERED WITH THE DEPARTMENT OF INFORMATION TECHNOLOGY. A completed registration form must be on file or received by DIT (Acquisition Services Division) not later than award date. Call (804) 371-5900 to request a registration form. Vendors may also download a Vendor Application form from ASD's web site with a URL of <http://asd.state.va.us> if you need assistance, call (804) 371-5948.

1.8 Vendor Understanding of Requirements:

It is the vendor's responsibility to inquire about and clarify any requirement of this RFP that is not clearly understood by the vendor. All verbal questions are discouraged. The Commonwealth will not be bound by verbal responses to questions. **All inquiries concerning this RFP should be submitted in writing to (Mark envelopes "Questions on RFP 2001-25"):**

Mr. J. B. Edmonds
Department of Information Technology
110 South 7th Street – East Lobby Level
Richmond, Virginia 23219
Fax: (804) 371-5969

All written inquiries must be received by the Issuing Office on or before the close of business April 16, 2001. Facsimiles are acceptable at (804) 371-5969 or e-mail to jedmonds@dit.state.va.us. No further written inquiries will be accepted after that date.

1.9 News Releases:

No public disclosure or news release pertaining to this procurement shall be made without prior written approval of the Issuing Office. **FAILURE TO COMPLY WITH THIS PROVISION MAY RESULT IN THE PROPOSER BEING DISQUALIFIED.**

1.10 Rejection of Proposals:

The Commonwealth of Virginia reserves the right to reject any and all proposals, in whole or in part, received in response to this request. DIT shall not cancel a Request for Proposals or reject any proposal solely to avoid awarding a contract to a particular responsive and responsible Offeror. In addition, DIT reserves the right to waive informalities and to delete items prior to award.

The term Offeror as referenced in this solicitation refers to the firm preparing and submitting a proposal in response to this Request for Proposals (RFP). The term Contractor refers to the firm who when awarded the contract will be responsible for services as required as a result of this solicitation.

1.11 Procurement Policies and Procedures:

Data processing and telecommunications procurement activity conducted by the Commonwealth of Virginia is governed by provisions of the Virginia Public Procurement Act and guided by provisions of the Vendor's Manual, December 1998, Commonwealth of Virginia. The provisions of this RFP are intended to conform to applicable policies and procedures contained in the aforementioned MANUAL. In the event that a vendor should perceive a provision of this RFP to be at variance with a provision of the MANUAL, VENDORS ARE DIRECTED TO REGARD THE RFP PROVISION AS PREVAILING.

1.12 Cost of Proposals:

The Vendor is responsible for all costs of proposal preparation. The Commonwealth is not liable for any costs incurred by a vendor in response to this RFP.

1.13 Identification of Proposals:

All proposals submitted for consideration shall be clearly marked on the outside cover of all envelopes, boxes or packages:

From: Name of Vendor
 Street or P.O. Box Number
 City, State, Zip Code
 Due Date: April 26, 2001 Time: NLT 4:00 p.m. (Local time)
 RFP Number 2001-25

Note: The technical and cost proposals must be submitted in separate, sealed packages with the appropriate label, i.e., "Technical Proposal" or "Cost Proposal".

1.14 Definition of “Mandatory” Requirements and “Desirable” Features:

1.14.1 Mandatory Requirements:

All mandatory requirements must be met in order for any proposal to be considered. The vendor must respond to the mandates identifying if he or she can fulfill the requirements identified herein and how the vendor proposes to meet the requirements. Substantiation to responses must be provided. The Commonwealth has established guidelines for offerors governing the interpretation of RFP requirements. The use of “shall”, “must”, or “will” in this RFP or its official amendments indicates a requirement or condition that is mandatory (mandatory requirement), and shall not be

construed in any way as allowing deviation from any requirement. Deviation from mandatory requirements will not be accepted by the Commonwealth. The Commonwealth of Virginia reserves the right to reject any and all proposals and to waive minor informalities.

FAILURE TO AGREE TO THE MANDATORY TERMS AND CONDITIONS SHALL RENDER THE VENDOR'S PROPOSAL NON-RESPONSIVE AND THE VENDOR SHALL NOT BE CONSIDERED FURTHER. THE VENDOR SHALL INCLUDE IN THE PROPOSAL A STATEMENT CONFIRMING ACCEPTANCE OF THE MANDATORY TERMS AND CONDITIONS VERBATIM, LISTED IN SECTION 9. OF THIS RFP.

1.14.2 Desirable Features:

There are a number of features that are considered desirable by the Commonwealth. Those services which will enhance the overall system and performance are not considered mandatory will be considered "desirable". Words such as "desirable", "should", "is requested", "is urged to", are important to the user in selecting a vendor, but in order to permit vendors to meet the requirements creatively, they are not specified as strictly mandatory requirements. Vendor responses to desirable services should meet stated goals, objectives, or enhance performance and identify how the proposed system meets the stated requirement. However, failure of a proposal to meet desirable requirements is not disqualifying. Vendors should document the extent to which they can meet the desirable or optional services. Proposals that provide more of the desirable features or that meet them more effectively than another proposal will be given stronger consideration in vendor selection.

1.15 Oral Presentation:

An oral presentation by the vendor may be required. If an oral presentation is required to clarify or substantiate any area contained in the vendor's response, the Issuing Office will schedule a time and place for the presentation. This provides an opportunity for the Offeror to clarify or elaborate on the proposal. This is a fact finding and explanation session only and does not include negotiation. The response must be complete in all respects, as oral presentations and demonstrations MAY or MAY NOT be scheduled. All costs incurred by vendor to provide oral presentations are the responsibility of the vendor.

1.16 Proprietary Information:

SECTION 11-52d, Virginia Public Procurement Act, states "Trade secrets or proprietary information submitted by a bidder, offeror or contractor in connection with a procurement transaction shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the bidder, offeror, or contractor must invoke the protections of this section prior to or upon submission of the data or other materials, and must identify the data or other materials to be protected and state the reasons why protection is necessary. The proprietary or trade secret material submitted must be identified by some distinct method such as highlighting or underlining and must indicate only the specific words, figures, or paragraphs that constitute trade secret or proprietary information. The classification of an entire bid or

proposal document, line item prices and/or total bid or proposal prices as proprietary or trade secrets is not acceptable and may result in rejection of the bid or proposal.

FAILURE TO MARK THE DATA OR OTHER MATERIALS AS STATED WILL RESULT IN THE DATA OR OTHER MATERIALS BEING RELEASED TO VENDORS OR THE PUBLIC AS PROVIDED IN THE VIRGINIA FREEDOM OF INFORMATION ACT.

1.17 Proposal Format:

The proposals should be organized in the exact order in which the requirements are presented in the RFP and should be page numbered. The proposal should contain a table of contents which cross references the RFP requirement and the specific page of the response in your proposal. Each paragraph in the proposal must correspond to and reference the paragraph number in the corresponding section of the RFP. The vendor must repeat the paragraph number, sub-letter, and text of the requirement as it is presented in the RFP. If a response covers more than one page, the vendor must repeat the paragraph number and sub-letter at the top of the subsequent page.

Proposals that are not organized in this manner may be eliminated from consideration for failing to specifically address the technical and contractual requirements. Vendors must document that they can meet mandatory requirement of the RFP and should document the extent to which they can meet the desirable or optional features.

Vendors are strongly encouraged to adhere to the following general instructions in order to bring clarity and order to the proposal preparation and subsequent evaluation process:

- a. The response should be complete and comprehensive, with a corresponding emphasis on being concise and clear.
- b. All proposed items should be identified as to whether they are in response to mandatory or desirable requirements. Each response to a mandatory item in the proposal must contain, as a minimum, a statement such as “XYZ Fully Complies”.
- c. Regardless of whether or not a desirable is being proposed, all desirables should be identified as to their availability and associated costs.
- d. Elaborate bindings or literature are not necessary, but all documents should be clear and legible. Poor quality copies of materials may be rejected.

1.18 Multiple Proposals:

A vendor may submit one or more proposals. At least one of the proposals must be complete and must comply with all of the instructions of this RFP. Additional proposals may be in an abbreviated form

following the same format and providing only the information which is different from that in the complete version.

1.19 Nondisclosure :

All proposal information will be treated as confidential and will not be disclosed except as required for the purpose of evaluation. In accordance with the Virginia Public Procurement Act (VPPA) Section 11-52C1, proposals will be available for public inspection after negotiations and selection.

1.20 Confidentiality of Information:

The Commonwealth of Virginia and vendors will agree the information and data obtained during the course of this project will not be used for any other purpose and may not be disseminated or discussed for any reason not directly related to this project.

1.21 Cost Information:

All cost information must be signed, sealed and provided in a separate envelope. No cost information will be included in the technical proposal. The cost forms in Section 6 must be completed and returned in a separate envelope.

The vendor's cost proposal must include all costs associated with the initial purchase, installation, training, customization and conversion to the proposed system, as well as any ongoing maintenance, operation, vendor support, user fees or charges or reimbursements and the "IFA". This includes all license fees, royalties, "third party" fees, and computer resources, as well as all labor costs, overhead and expenses.

The vendor must be willing and able to successfully deliver all products and services proposed and to complete the project on a firm fixed-price basis. If the vendor desires to propose additional products and/or services which it believes would benefit the COV (but are not required to successfully complete the project as proposed), such items should be included and clearly identified as optional.

1.22 Vendor Identification:

The primary (prime) vendor must identify a contact person, by name, organization and telephone contract number, who will be responsible for coordinating the efforts and personnel of all parties and/or subcontractors involved in the response. This includes, but is not limited to, responses to requests for interviews, oral presentations and clarifications of responses to the RFP.

1.23 Evaluation Criteria:

All proposals received will be reviewed and evaluated by the Selection Committee using the following criteria, the order of which is not indicative of their weight or importance:

- a. Vendor's qualifications, including experience in similar sized installations, with similar solutions.
- b. Vendor's proposed solution
- c. Proposed cost.
- d. Where the proposed equipment falls within the technology life-cycle.
- e. Extent Vendor agrees with desirable terms and conditions.
- f. Participation of Small, Women-Owned and Minority-Owned Businesses.

1.24 Evaluation Process:

Proposals are evaluated on the basis of the criteria enumerated in the RFP and are scored in accordance with a weighting scheme established and approved prior to the opening of any proposals.

The Commonwealth is not required to furnish a statement of the reasons why a particular proposal was not the most advantageous. Should the Issuing Office determine in writing, and in its sole discretion, that only one vendor is clearly more highly qualified than others under consideration, a contract may be negotiated and awarded to that vendor.

The proposal evaluation process involves, first, the review by a Selection Committee of all proposals received in response to the RFP to ensure that each proposal meets the mandatory requirements and the mandatory terms and conditions identified in Section 8 of this RFP. Proposals which have been determined by the Selection Committee not to have met one or more mandatory requirements or mandatory terms and conditions, and cannot be brought into compliance, are excluded from any further consideration, subject to approval by the Review Committee.

The second process in the evaluation of proposals involves each Selection Committee member evaluating the vendor's technical proposal and assigning a score to each of the selection criteria based on his/her personal understanding or interpretation of each of the proposed items. It will be decided at the beginning of the process how scores are to be assigned to each of the criteria (such as from zero to ten with five as average). The full Selection Committee will then meet to discuss the scoring. Members may change their scoring, if they desire. Preliminary scoring may also be changed by committee members after oral presentations or demonstrations.

Final scores are then totaled and multiplied by the weights assigned to arrive at a cumulative score and numerical ranking. The vendor's cost proposals will be opened at this point by the Selection Committee. The proposed costs will be evaluated using the formula below. The technical and cost proposals will be summed to provide a ranked list of vendors. Unless there is deemed to be one vendor that is clearly more qualified, two or more vendors deemed to be fully qualified and having the highest evaluation scores are then selected for technical negotiations. Vendor may be requested to provide revised pricing (best and final) for their proposals as amended during negotiation. If revised costs are requested, cost will be recomputed; scores for the other evaluation criteria **MAY NOT BE ALTERED**. The lowest price received is the basis for the application of the cost scoring formula.

The cost scoring formula for evaluating proposals is:

Cost factor = (LV/V)

Where: LV = lowest cost vendor (\$)

V = vendor being evaluated (\$)

Cost score = cost factor x points available for cost

Final scores are then computed for purposes of ranking, and the vendor having the highest total score is selected for further negotiation. DIT will then enter into negotiations of the Desirable Terms and Conditions and any pricing issues or other issues with the selected vendor.

1.25 Review Phase:

A Review Committee, consisting of Commonwealth employees who do not have a direct involvement in the selection, will review the selection process and major decisions such as vendor disqualification, to ensure that the selection was fair and unbiased.

1.26 Post Award Review:

Following selection of the winning vendor(s) and formal notification, the Director, Acquisition Services Division, or his designated representative, will review the selection with other vendors on an appointment basis only. Vendors desiring to review the selection process must do so within 30 days after Notification of Intent to Award, or other notification as deemed applicable by DIT, is posted.

1.27 Site Visits

The Commonwealth may require the vendor to arrange a visit by the selection committee to a customer site with equipment/software identical to or nearly identical to that proposed. The site should have a volume of tape activity similar to DIT. The site should be one of the vendor's listed references.

For planning purposes, the vendor should arrange for, and provide several dates, close to the closing date of the RFP, for the selection committee's consideration as possible visit dates. The group would consist of no more than six (6) individuals. Should the sites be outside of the Richmond area, the Commonwealth will pay for all travel, meals and lodging. The vendor may be asked to assist with arrangements to insure coordination with vendor personnel traveling to the site.

1.28 Participation by Small Businesses, and Businesses Owned by Women and Minorities.

It is the policy of the Commonwealth of Virginia to contribute to the establishment, preservation and strengthening of small businesses and businesses owned by women and minorities and to encourage their participation in State procurement activities. The Commonwealth encourages contractors to provide for

the participation of small businesses and businesses owned by women and minorities through partnerships, joint ventures, subcontracts, and other contractual opportunities. Submission of a report of past efforts to utilize the goods and services of such businesses and plans for involvement on this contract is required. By submitting a proposal, offerors certify that all information provided in response to this RFP is true and accurate. Failure to provide information required by this RFP will ultimately result in rejection of the proposal.

All information requested by this RFP on the ownership, utilization and planned involvement of small businesses, women-owned businesses and minority-owned businesses must be submitted. If an offeror fails to submit all information requested, the purchasing agency may require prompt submission of missing information after receipt of vendor proposals.

Instructions for providing the required information, including definitions, are included as Appendix "A" to this RFP. Forms to assist the offeror in providing the required information are also included as Appendix "B". You are not required to use the forms so long as the minimum information required is provided in the prescribed format.

1.29 Contractual Binding:

- a. This RFP, the response submitted by the successful contractor, and all amendments and written clarifications, or any portions thereof, may be incorporated into the agreement signed by the successful contractor and the Commonwealth of Virginia. If a proposal contains items or services which are not manufactured, generally supplied, or maintained by the proposing vendor, the vendor will accept full responsibility for the service as if it were the vendor's own. The Commonwealth will contract only with the prime vendor who will be responsible for the performance of and payment to any subcontractor(s).
- b. Price quotations and other time dependent information contained in proposals shall be valid for a minimum of 120 days following the closing date.
- c. SECTION 9. of this solicitation, entitled "Mandatory Terms and Conditions" for acquisition of an Automated Tape Library System, contains the mandatory terms and conditions. These terms will be included verbatim in any agreement executed by the Department of Information Technology. **FAILURE TO AGREE TO THE MANDATORY TERMS AND CONDITIONS SHALL RENDER THE VENDOR'S PROPOSAL NON-RESPONSIVE AND ELIMINATE THE VENDOR FROM FUTURE CONSIDERATION. THE VENDOR SHALL INCLUDE IN THE PROPOSAL A STATEMENT CONFIRMING ACCEPTANCE OF THE MANDATORY TERMS AND CONDITIONS, VERBATIM LISTED IN SECTION 9. OF THIS RFP.**

1.30 Acquisition Services Division Web Site:

The Acquisition Services Division (ASD) of the Department of Information Technology maintains a web site with a URL of <http://asd.state.va.us>. This web site provides information about ASD and acquisitions conducted by ASD for Information Technology related items. Vendors are invited to check this site regularly.

SECTION 2: GENERAL VENDOR INFORMATION

2.1 General Information:

This section requires information about the vendor's background and experience.

2.2 Vendor's Operating Organization:

Provide an overview of the operating structure and geographical locations of the firm at the national, regional, and local levels.

2.3 Company Contact:

Provide the name, title, street address, city, state, zip code, and telephone number of the primary contact person.

2.4 Corporate Identity:

- a. Provide the identity of any parent corporation.
- b. Provide the identity of any subsidiaries if appropriate.

2.5 Corporate Financial Status:

- a. For publicly held companies, vendors must provide a copy of their firm's (information systems division or corporation only, if consolidated statements are published) audited financial statements from the most recent fiscal year, and the preceding two fiscal years; must provide their Dun and Bradstreet credit rating number, and must provide their Moody's Investment Service Bond Rating and/or Standard & Poors Bond Rating if they have publicly held debt.
- b. For privately held companies, vendors must provide a copy of audited financial statements for the most recent and two preceding fiscal years or other indicator(s) of financial stability.

2.6 Vendor Qualifications:

- a. Company name, pre-award and post-award contact persons, address, telephone number, facsimile number, e-mail addresses, Federal Identification Number and firm's web site, if applicable.
- b. List of corporate officers, years in business, including a list of all corporate names the firm has used to conduct this type of business (include the dates and states of incorporation for each corporate name).

- d. Those Offerors unable to provide three years of annual revenues shall provide verifiable evidence of as many years (or partial years) annual revenues as do exist along with a current audited financial statement.

2.7 References:

The Offeror shall provide at least three (3) current references who can confirm the firm's qualifications. References provided should be of the similar size, with tape volume activity similar to that of the Department of Information Technology. See the Vendor Client Reference Form in APPENDIX G. The Commonwealth will make such reasonable investigations as deemed proper and necessary to determine the ability of the Offerors to perform the contracts, and these may include, but may not be limited to, reference checks and interviews.

SECTION 3: GENERAL BACKGROUND/DESCRIPTION OF CURRENT ENVIRONMENT

3.1 General Information:

The Department of Information Technology operates a multi-platform data center which currently houses:

	MVS		Unisys		Sun
Processors	Amdahl CMOS GS795	HDS Skyline 425	Unisys IX6802-8	Unisys 2200/9844	E10000
Memory	5gb Total 2.6gb Central 2.4gb Expanded	3.5gb Total 2gb Central 1.5gb Expanded			
Channels	96 - ESCON 16 - Parallel	72 - ESCON 16 - Parallel	12 – 4.5MB 2 - Ethernet 5 - FDDI 4 - SCSI	43 – 4.5MB 53 – 3.0MB	
DASD	2.9 Terabytes (1151 Vols)		680gb (50 Vols)		6.12 Terabytes
Front-End Processors	2 – 3745-31A		1 – DCP35		
Tape	Sutmyn ATL Sutmyn Scimitar VTS (100gb) 48 – 3490E (in ATL) 4 - 3480 4 - 3420		48 – 4490 6 - 4780 5 - U36		2 DLT
Printers	2 - IBM 3900 1 – STK 5000		2 – Unisys 0770-06		

The Amdahl and Hitachi systems share the Sutmyn ATL with a 30,000 cartridge capacity, one (1) Sutmyn Scimitar VTS, six (6) Sutmyn Dual Tape Control Units supporting 48 3490E-type cartridge tape units.

As the DOMAIN administrator for the “state.va.us” domain, DIT maintains a number of “mission critical” SUN Solaris platforms connected to the Internet.

In addition to the platforms mentioned above, DIT operates a “server farm” with a variety of Microsoft NT and UNIX platforms from SUN, Hewlett Packard, Dell and Compaq. These servers are for both customer and internal DIT support.

DIT has a recently installed automated tape library system to provide backup of the E10000, NT and other Open Systems platforms. This system used DLT tapes, an ADIC ATL and Vertitas software.

SECTION 4: MANDATORY REQUIREMENTS

This section provides a minimum number of parameters or ground rules for the proposed solution provided by the vendor. The actual quantities and solution is to be determined by the vendor by modeling the DIT tape environment. Parameters or ground rules stated herein are deemed minimums.

DIT will provide a data file containing 45 days of SMF data that provides a window that is typical of the tape usage of the data center. Based on this data the vendor shall provide a solution that can handle this workload, given the ground rules and performance criteria listed in this section. The vendor's cost proposal shall list all expansion options to the proposed solution with price protection for at least 12 months after acceptance of the initial equipment.

4.1 General

- a. The vendor must provide an installation plan with their proposal that identifies all major tasks, time frames and responsibilities.
- b. The vendor must agree to supplement the installation plan with a specific plan that identifies all tasks, time frames and responsibilities within ten (10) days of award.
- c. The vendor shall include a growth plan that charts the configuration of the proposed configuration from the installed configuration to its realistic maximum. The Cost proposal must include the costs for such upgrades.
- d. All tape units, to be installed in the ATL, shall be from the same manufacturer as the ATL.
- e. All proposed equipment shall be certified eligible for maintenance by the OEM.
- f. All proposed items (excluding the 3490E standalone units and associated controllers) must be in current production and remain so for the first six months of the contract. If replaced in that time period, the vendor must offer DIT an upgrade to the replacement technology at no additional cost.
- g. The vendor must provide all physical planning information for all of the proposed hardware.
- h. The vendor must provide all cables, connectors, features, firmware, software and other features or items necessary to make the proposed hardware operational in the DIT environment. These items must be included in the vendors proposed pricing and include inside delivery.
- i. The vendor must provide a complete list of all hardware and software products included in the proposed solution, including hardware model numbers and software version or release numbers. "Previously Owned" equipment is acceptable. The vendor must denote whether each item is "New", "Refurbished" or "Used".

4.2 Workload Model To Determine Capacity

- a. The workload model, outlined in Appendix D, shall be utilized by the vendor to configure the vendor's hardware and software response to this proposal.
- b. DIT will provide prospective vendors a set of tapes containing SMF data for a 45 day period, as outlined in Appendix D. Vendor must provide a \$100 deposit for each set of tapes. The

deposit will be returned upon return of the tape sets. Make checks payable to “DIT”. Notify the issuing office of your desire for a set of tapes and they will notify you as to how to submit payment and receive the tape sets.

- c. The vendor’s proposed configuration must be sized to provide 110% of the capacity and performance of the existing environment, as calculated from provided SMF data (DIT’s tape workload is projected to grow 10% between the SMF data time period and anticipated installation, based on historical data).
- d. The acceptance test outlined in 4.13 and the criteria in Appendix D shall be used to determine whether the proposed solution meets the requirements of the Commonwealth.
- e. In the event the proposed solution fails to meet the criteria of 4.13 or Appendix D, the vendor will, at the Commonwealth’s sole discretion, be give one or both of the following options:
 1. Provide within 15 days, a one-time addition of hardware and/or software that brings the solution into compliance, at no further expense to the Commonwealth, or;
 2. Remove the solution from DIT, to be replaced by the next responsive bidder.

4.3 ATL

- a. The proposed ATL must have a cartridge storage capacity of at least 3000 slots. If the vendor’s model indicates a requirement for additional slots, the number shown in the model must be proposed.
- b. The proposed ATL must support either IBM 3590J or STK 9840 cartridges
- c. The maximum number of insert/eject ports for the model proposed must be provided.

4.4 High Capacity Tape Units

- a. The vendor must supply a minimum of 24 high capacity tape units, either IBM 3590E or STK 9840. If the vendor’s model indicates a requirement for additional drives, the number shown in the model must be proposed.
- b. There must be no more than four physical tape units per controller.
- c. The number of ESCON channel adapters per control unit must be greater than 50% of the ratio of drives to control units. For example, if there are four tape drives per control unit, there must be at least three ESCON channel adapters per control unit; if there are two or three drives per control unit, there must be at least two ESCON adapters per control unit; if there is one drive per control unit, there must be at least one ESCON channel per control unit. This requirement does not apply to physical tape drives that are dedicated to the VTS and are unknown to MVS.

4.5 Standalone Tape Units

- a. The vendor must provide twenty-four (24) 3490E (IBM or compatible equivalent STK) tape drives with automatic cartridge loaders (ACLs), and six (6) 3490E (IBM or compatible equivalent STK) tape controllers. Each of either six single or three dual tape controllers must

be equipped with two (2) ESCON channel adapters. Configuration of tape drives should be either four drives per single tape controller or eight drives string-switched per dual tape controller.

4.6 Cartridges

- a. Cartridges provided must be either IBM 3590J or STK 9840 cartridges that are compatible with the proposed hardware.
- b. The vendor must provide 5,000 cartridges. If the vendor's model indicates a requirement for additional cartridges, the number shown in the model must be proposed.
- c. Cartridges must be pre-initialized, and pre-labeled with bar-code labels compatible with the ATL proposed. DIT will provide the vendor with one or more beginning volume serial numbers for each group (VTS, ATL, etc.)

4.7 VTS

All hardware required by the VTS, such as DASD for cache and physical tape drives for destaging, must be included. The physical tape drives used by the VTS must be automated by one or more ATLs. In the case of an MVS host-based software VTS solution, additional hardware to accommodate the increased host processing workload from virtual tape migration must be provided.

- a. The proposed VTS must provide for 3490E-type virtual tape volumes
- b. A minimum of 640GB of DASD (effective capacity, taking any compression into account) must be provided for cache. If the vendor's model indicates a requirement for additional cache, the amount shown in the model must be proposed.
- c. A minimum of 33 virtual tape drives must be provided. If the vendor's model indicates a requirement for additional drives, the number shown in the model must be proposed.
- d. Virtual tape destaging must preserve volume serial numbers and catalog status (whether or not the dataset is cataloged). It also must preserve dataset identification data, including the following CA-1 Tape Management Catalog (TMC) fields: dataset name, user job accounting area (account number), creation date and time, expiration date, date and time last used, creating job name, creating step name, creating DD name, creating program name, record format, record length, and block size. Virtual tape exporting must preserve dataset identification data in the same way, except that volume serial numbers may change, and when they change for a cataloged dataset, the dataset must be recataloged with the new volume serial number(s).
- e. In the case of an MVS host-based software VTS solution, the vendor's proposal must provide upgrades to DIT's processor storage on each of DIT's presently installed central processor complexes sufficient to cover the increased virtual storage demand of any address spaces, data spaces, and hiperspaces used to stage virtual tape I/O requests without increasing the paging rate for the MVS systems in which those VTS virtual storage spaces reside.

- f. In the case of an MVS host-based software VTS solution, upgrades to DIT's ESCON directors and channel configurations sufficient to fully accommodate the virtual tape migration I/O workload in compliance with the overall ATL and VTS performance requirements contained within this RFP must be proposed and provided.
- g. In the case of an MVS host-based software VTS solution, VTS DASD cache must be modeled and sized sufficient to avoid any need for virtual tape migration activity during DIT's peak CPU demand hours, which are 9:00am through 12:00am and 2:00pm through 4:00pm on normal COV work days (non-holiday Monday through Friday). Any additional cache required must be proposed and provided as part of the solution.
- h. If the vendor's model shows that memory or channels must be upgraded in order to support their solution that meets the stated requirements, then the vendor is responsible for including the necessary upgrades in their proposal.

4.8 Software

- a. Software must be compatible with OS/390 2.10, z/OS and must be kept current with all future releases.
- b. The provided software must be compatible with Computer Associates CA-1 TMS (5.2), IBM DFSMS and HSM (1.5 and 2.10) and must remain compatible with future versions of these products.
- c. Vendor must provide, with their proposal, a list of all software version and release requirements.
- d. The software must provide the compatibility to "gen" the new hardware using IBM's HCD process. This information should be in the format of Chpid, Control Unit and Device statements, and given to DIT in advance of the equipment arriving. Suggestions on how many chpids and control units to "gen" to get the best performance from the equipment is required.
- e. The vendor must provide technical support to resolve any problems associated with the "gen". Vendor should provide sample "gen" statements and an overview of setup practices and procedures.
- f. Software must be able to run in parallel and be compatible with Sutmyn LMS (3.4.0) for the period of converting from the old hardware to the new hardware, as per the implementation plan. Explain how your company has ensured software compatibility.
- g. Software must be able to direct tape datasets either explicitly or by default to 3490E drives, high capacity drives, and the VTL. Describe how the software performs this function and the controls provided.
- h. Software must provide the ability to monitor VTS utilization statistics, e.g. cache. Explain how this is done.
- i. Software must provide the ability to control functions and parameters to manage the tape environment, such as, changing threshold percentages, recycle, destaging by dataset name or individual files. Explain how your software enables the user to control and manage the tape environment.
- j. The software must provide a tape mount monitor function, as follows: For every ATL mount (except possibly mounts of destage tapes done on behalf of the VTS) and for every virtual tape

mount, there must be a record written including the timestamp of when the mount was requested, the timestamp of when the mount was completed, the tape drive device address, the volume serial number, the requesting job name, and whether the mount was specific or non-specific. For every virtual tape mount, the record must also indicate whether the mount was a hit (satisfied in cache) or a miss (requiring a recall).

- k. Vendor must provide on-site Systems Engineering support as required to assist with software installation and configuration, specifying parameters, “gen” configurations, and knowledge transfer to DIT engineers. Support should be made available through the completion of the acceptance period.
- l. Vendor must provide documentation for all software included in this RFP. This should include hardcopy (5 sets) and softcopy (5 sets). DIT also requests permission to copy documentation as needed for internal use only.
- m. Software must have ability to write SMF Records for all activities.

4.9 Availability

- a. The ATL, or each ATL separately, must be available 99.7 percent of the time, averaged over a month, including unplanned outages, but excluding planned outages. This includes tape drives and tape control units only to the extent that the ATL cannot function unless some tape drives and tape control units are functional. An ATL is considered to be available if all of its functions (including mounts, dismounts, inserts, and ejects) are available, even if one or more of its components is temporarily non-functional. For example, an ATL with two robots (or two robotic hands) is not considered to be unavailable just because one of the robots (or robotic hands) is not functional.
- b. The VTS must be available 99.7 percent of the time, averaged over a month, including unplanned outages, but excluding planned outages. This includes tape drives and tape control units only to the extent that the VTS cannot function unless some tape drives and tape control units are functional and available for destaging. The VTS is considered to be available if all of its functions (including virtual tape mounts, destaging, recalling, exporting, and recycling) are available, even if one or more of its components is temporarily non-functional. The VTS is not considered to be available if any of the cache DASD is unavailable so that any existing virtual tape dataset cannot be read.

4.10 Installation and Delivery

The vendor shall begin delivery within 20 days of award. An installation schedule will be mutually agreed upon prior to execution of any contract. Sufficient floor space is available for assembly and staging.

4.11 Warranty/Maintenance

The vendor must provide a solution with a three-year, on-site warranty on all products. The vendor must quote a “not to exceed” price for maintenance of all proposed components for the fourth year of service. The vendor shall provide as a minimum:

- a. 24 hour, 7 day a week, 365 days a year, on-site repair and support with 2-hour response as defined in the attached Terms and Conditions. The vendor must provide a telephonic response within 30 minute of call placement.
- b. All parts, travel and labor and other costs required to meet the stated availability standard.
- c. The vendor must specify in writing the frequency and duration of the preventive maintenance required for the equipment proposed under this Agreement and the Commonwealth shall specify the schedule for the performance of the preventive maintenance. This schedule may be modified by mutual agreement.
- d. The Contractor shall provide the Commonwealth with defined points of contact and make the arrangements to enable its maintenance representative to receive such notification or other continuous telephone coverage to permit the Commonwealth to make such contact.

4.12 Training

- a. Vendor must provide sufficient onsite training for DIT Operations staff encompassing three shifts with two sessions for each shift so as not to impact daily production of DIT Data Center
- b. Vendor must provide a minimum of 2 days on-site training for twelve DIT Software Engineers covering general information on operations and software support to ensure proper operation and management of the new ATL/VTL systems.
- c. Describe the classroom training offered by the vendor or affiliates for the products installed per this contract. The description should include locations, dates, and costs.

4.13 Acceptance Test

- a. The Commonwealth shall accept the proposed equipment after successful completion of an acceptance test. The first part of the acceptance test will measure the performance and availability of the hardware/software against the following benchmarks:
 1. Ninety-five (95) percent of ATL mounts (excluding those done in support of the VTS) must be satisfied within 90 seconds, measured over a “shift” (as defined in Appendix C). This will be measured using the tape mount monitor records. The elapsed time for each ATL mount will be calculated as the difference between the mount completion timestamp and the mount request timestamp.
 2. Ninety-five (95) percent of virtual tape read hits and write hits must be satisfied within 1 second, measured over a “shift”. This will be measured using the tape mount monitor records.

The elapsed time for each virtual tape mount satisfied in cache will be calculated as the difference between the mount completion timestamp and the mount request timestamp.

3. Ninety-five (95) percent of virtual tape read misses and write misses must be satisfied within 90 seconds, measured over a “shift”. This will be measured using the tape mount monitor records. The elapsed time for each virtual tape mount requiring a recall will be calculated as the difference between the mount completion timestamp and the mount request timestamp.
 4. A benchmark will be run using a compressed data input volume (a 3390-3 volume filled with compressed FDR DUMP datasets). With this input volume isolated from contention, an FDR DUMP of the volume will be created on the VTS. The performance must be at least as good as that specified by the vendor in reply to 5.7.e. (For comparison purposes, the same dump will be done to high-capacity tape on the ATL, and as a duplex dump to the VTS and ATL simultaneously.)
- b. The second part of the acceptance test will evaluate the performance of scheduled batch job tape processing. There are two criteria, both of which must be met.
1. The first criterion is that all batch jobs with job name SYSBKnnn, where nnn is any three digit number, that are scheduled during each overnight scheduling period complete before 5:22 am of that overnight schedule period on over 95% of applicable nights (Sunday night through Friday night) during the acceptance period.
 2. The second criterion is that at least 90% of scheduled executions of jobs from a list of system ID and job names for 299 daily, weekly, and monthly jobs must complete within their individual target completion times. The job names are listed in Appendix D, item D-1.g, along with the system ID and completion target service goal for each job. The acceptance goal is that at least 90% of job executions for these selected jobs must complete before their target completion time during the acceptance period.
3. The following guidelines apply to both criteria.
- i. DIT’s schedule period for each day begins at 3:00 pm that date and ends at 3:00 pm the following day, such that scheduled jobs for that entire 24-hour period reflect the scheduled date of the beginning of that period. In practice, the measured 299 individual jobs usually execute between 5pm and 7am the next day. For this reason, any executions of these jobs ending between 3pm and 5pm are considered ambiguous with respect to the scheduled date and are ignored for purposes of the acceptance test.
 - ii. When more than one job with the same name runs during the same schedule window, only the last execution counts as meeting or missing the execution end time target.
- c. The acceptance period will begin at a mutually agreed upon date after release of the system by the vendor to the Commonwealth.
- d. The acceptance test will run for 30 days unless there is a failure to meet the criteria in 4.13a and 4.13b. In the event a failure occurs during the 30 day period, the vendor will be given a chance to

correct the problems associated with the failure and a new 30 day window will begin upon written notification from the vendor that the system is ready to test. The vendor will be given one additional opportunity to meet the acceptance criteria under the same guidelines. A third failure will result in termination of the acceptance test and the remedies of 4.2e may, at the Commonwealth's discretion be exercised.

- e. The ATL must be available for at least 99.8% of the time for the duration of the acceptance period. The VTS must be available for at least 99.8% of the time for the duration of the acceptance period.

4.14 Incentives

- a. The Commonwealth measures availability of sub-systems in the DataCenter on a monthly basis and meets with its vendors to discuss all outages. The required availability of the ATL and VTS is 99.7% as stated in Section 4.9. To provide an incentive for the vendor to propose sufficient redundancy and availability features as well as provide "top-flight" engineers and parts availability, the Commonwealth will require the successful vendor to add at least one month of "cost-free" warranty service, for all products proposed, for each month the ATL or VTS sub-systems fail to meet the required availability.

4.15 Trade-In

The vendor must propose to take the Sutmyn ATL, VTS, control units and 3490E drives in trade. This hardware consists of a Sutmyn 5600 ATL (with about 30,000 cartridge slots), six Sutmyn 5499-2 control units, 12 Sutmyn 5498 tape drive units (48 transports), and a Sutmyn VTS. The following conditions apply:

- a. The units must be left in place for a minimum of 60 days from the acceptance date to allow transition to the new tape system.
- b. The vendor shall be responsible for de-installation, packing, and removal from the DIT Datacenter including all associated costs.
- c. Title will be transferred in writing to the vendor upon completion of the transition to the new equipment.

SECTION 5: DESIRABLE REQUIREMENTS

5.1 General

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5.2 Workload Model to Determine Capacity

- a. It is desirable that the vendor propose, and provide, costs for a solution configured and sized to accommodate the current DIT MVS virtual and physical tape workload, plus 25% growth while maintaining the performance and throughput requirements.

5.3 ATL

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5.4 High Capacity Tape Units

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5.5 Stand-Alone Tape Units

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5.6 Cartridges

- a. It is desirable that the vendor agree to provide an on-going supply of cartridges at a “not-to-exceed” cost for the duration of the warranty period.

5.7 VTS

- a. It is desirable that VTS processing be done on a separate processor, i.e., that virtual tape be based on a hardware virtual tape library.
- b. It is desirable that the VTS allow different sets of destaging rules for different groups of datasets. That is, some groups of virtual tape datasets, for example small datasets that are likely to be used as input multiple times over a period of several days, might be kept in cache longer than other groups of virtual tape datasets. It should be possible to implement this by specifying which datasets it applies to (i.e., which datasets are subject to special destaging rules, such as being kept in cache longer).
- c. It is desirable that the VTS provide the option of quick non-destructive destaging of new virtual tape datasets (except when doing so would cause performance problems), so that a new virtual

tape dataset can exist on physical tape and in the cache, until it is eventually removed from cache to free up cache space. This would be useful as a way of minimizing data loss in the event of a complete loss of the cache. It should be possible to make this a default option, with only the exceptions (datasets not subject to quick non-destructive destaging) having to be specified.

- d. It is desirable that the VTS provide the option of quick destructive destaging of new virtual tape datasets (except when doing so would cause performance problems), so that a new virtual tape dataset can exist only on physical tape. This would be useful for large datasets that are unlikely to be used as input. It should be possible to implement this by specifying which datasets it applies to (i.e., which datasets are subject to quick destructive destaging).
- e. It is desirable that the maximum sustainable I/O throughput rate of an individual VTS virtual tape unit be at least equal to the maximum ESCON channel path effective data rate for FDR DUMP processing (about 14 MB/Sec when BUFNO=MAX). Specify the maximum sustainable effective data rate of a virtual tape device in the proposed VTS, assuming no performance improvement from data compression. Also specify how long it would take to FDR DUMP a full 3390-3 volume to virtual tape in the proposed VTS, assuming no external contention for the input volume and no performance improvement from data compression. This specified performance must be demonstrated in the acceptance test described in 4.13.a.4.
- f. It is desirable that the VTS be upgradeable to support a high sustainable aggregate I/O throughput rate. What is the maximum sustainable aggregate I/O rate in MB/sec of the proposed VTS? How many concurrent virtual tape devices must be active to attain that I/O throughput rate limited by an ESCON effective data transfer rate assumed to be 14 MB/sec? Configured with the maximum ESCON channel attachments then what would be the maximum sustainable aggregate I/O rate in MB/sec of the proposed VTS? How many concurrent virtual tape devices would need to be active to attain that I/O throughput rate?

5.8 Software

- a. The software component should produce reports to include the following:

ATL:

- 1. Number of cells both occupied and available
- 2. Number of scratch tapes available in ATL
- 3. Number of active/occupied tapes in ATL
- 4. Display cell location of any given tape volser
- 5. Show last use/mount date/time for any given volser
- 6. Any error conditions encountered (Date & Time stamped)

VTL:

- 1. Number of virtual tapes occupied and available

2. Number of Recalls taking place on some interim basis
 3. Number and status of tapes eligible to be recycled
 4. Number of virtual tapes eligible to be destaged.
 5. Number of Read/Write Hit/Misses from Cache
 6. Number of Mbytes used by file and size
 7. Show destaging activity taking place
 8. Show exporting/migrations taking place
 9. Amount of Cache space used/available showing percentages
 10. Any error conditions encountered (Date & Time stamped)
- b. It is desirable that the ATL tape-mount-monitor-function, report the dataset name for each ATL mount.
 - c. It is desirable that the tape mount monitor function report whether each ATL mount is a conflict out.
 - d. It is desirable that the VTS tape mount monitor function, report the dataset name for each virtual tape mount.

5.9 Availability

- a. It is desirable that planned ATL outages be minimized, and that concurrent maintenance and upgrades be available. A statement should be provided to describe the extent to which planned outages are needed, and the extent to which maintenance can be done without an outage.
- b. It is desirable that planned VTS outages be minimized, and that concurrent maintenance and upgrades be available. A statement should be provided to describe the extent to which planned outages are needed, and the extent to which maintenance can be done without an outage.

5.10 Installation and Delivery

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5.11 Warranty/Maintenance

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5.12 Training

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5.13 Acceptance Test

- a. It is desirable that the ATL be able to sustain a minimum of 300 exchanges per hour under full load. A statement should be provided, estimating what this exchange rate would be for the current DIT workload, and the maximum theoretical exchange rate for the proposed solution
- b. It is desirable that ninety-five (95) percent of ATL mounts (excluding those done in support of the VTS), and ninety-five (95) percent of virtual tape read misses and write misses, be satisfied within 60 seconds, averaged over each eight-hour shift.

5.14 Incentives

- a. In addition to the provisions of 4.14, the vendor may propose additional concessions that it is willing to make to convince the Commonwealth of its commitment to high availability.

SECTION 6: TECHNICAL QUESTIONS

6.1 CAPACITY

1. Describe the extent to which the number of ATLs, ATL slots, physical tape drives, virtual tape drives, and GB of VTS cache can be increased. Describe the amount of down time or other disruption required for each type of expansion. Describe the amount of added floor space (with and without service clearances) required for each type of expansion.

6.2 ATL AND TAPE DRIVES

2. Indicate the maximum amount of time the ATL takes to load/unload the access door(s) during normal processing.
3. Describe the extent to which the ATL and physical tape drives are compatible with non-MVS systems, such as Unisys or Unix.
4. What is the mean-time-between-failure figure for your installed base? What is the mean-time-between-failure at locations with similar configurations or the configuration proposed.
5. Describe any limitations, practical as well as theoretical, in the number of OS/390 logical partitions that can share the proposed ATL and VTS.
6. What mix of tape drive models and media can be housed in the ATL, including all manufacturers.
7. How many units of the proposed ATL device type and model are presently installed in the United States?
8. How many units of the proposed tape drive device type and model are presently installed in the United States?

6.3 VTS

9. Describe how the VTS manages space along with any factors that influence such management or tools that allow the user to manage the space.
10. Describe the extent to which the VTS is compatible with non-MVS systems, such as Unisys or Unix.
11. Describe how destaging is done. Describe the factors that affect destaging performance, such as backend channels speeds or balancing workload across multiple paths.
12. Describe how exporting is done.

13. Describe how recycling is done, how it is controlled, and what the trade-offs are regarding higher or lower destage tape utilization
14. If VTS processing is done on the mainframe, rather than on a separate processor, estimate the mainframe processor overhead for virtual tape. Show how this overhead is likely to vary, depending on time of day and type of VTS activity (e.g., recycling and destaging).
15. What is the mean-time-between-failure figure for your installed base?
16. Describe the extent to which the VTS and its physical drives are currently compatible with non-MVS systems such as Unisys or UNIX.
17. Describe the hardware technology used for the VTS, and elaborate on any features that guarantee redundancy, improve performance, or increase throughput.
18. How many units of the proposed VTS device type and model are presently installed in the United States?

6.4 STANDALONE DRIVES

19. Describe any optional features or enhancements to the proposed 3490E standalone tape configuration that would provide better performance or increased throughput.
20. Are the proposed drives currently being manufactured?

6.5 SOFTWARE

1. Describe any operating system exits or modifications required. If any are needed, indicate whether these are provided in SMPE or other format.
2. Describe the system resources used by the ATL and VTS hardware and software.
3. Describe your company's technical software support services.

6.6 AVAILABILITY

4. Describe redundancy features that affect ATL availability, VTS availability, and tape drive availability. List all steps taken, in the proposed solution, to increase availability over that found in standard implementations and installations. List all single points of failure in the proposed solution.
5. Based on the manufacturer's installed base and/or publicly available benchmarks, quantify the increased availability of the redundancy features of the proposed solution over a solution that does

not contain those options. In addition quantify the availability that could be obtained by the addition of options available but not proposed.

6. Indicate the outage of each device for routine maintenance. Differentiate between device and system outages.
7. Indicate the outages necessary for upgrades of the proposed components. Differentiate between device and system outages.

6.7 IMPLEMENTATION

8. Provide an implementation plan. Show the sequence in which hardware and software items must be installed. For each hardware or software item to be installed, estimate the time required for installation. Also show the implementation requirements other than installation, such as IO gens and populating ATL(s) with cartridges.

6.8 MAINTENANCE

9. State the names, titles, skill level, training and street address location of service personnel responsible for responding to trouble calls at DIT's location.
10. Provide a list of spare parts locations from which replacements parts will be stored and made available to the Commonwealth.
11. Describe your escalation procedure.

6.9 FUTURES

12. Describe your firm's/manufacturer's future plans for the proposed ATL. Include current phase-out plans and plans for replacement products. Describe all upgrade offerings and plans. Elaborate on how these changes will contribute to extended usefulness and/or better performance of the hardware and software systems proposed.
13. Describe your firm's/manufacturer's future plans for the proposed VTS, including associated software. Include current phase-out plans and plans for replacement products. Describe all upgrade offerings and plans. Elaborate on how these changes will contribute to extended usefulness and/or better performance of the hardware and software systems proposed.
14. Describe your firm's/manufacturer's future plans for the proposed high-capacity tape units. Include current phase-out plans and plans for replacement products. Describe all upgrade offerings and plans.

SECTION 7: PRICING SCHEDULE

The vendors cost proposal (Section 7) must be submitted in a separate, clearly marked and sealed envelope. A summary page, similar to the page below, must be provided as Section A. Additional pages (Section B) must show a breakdown of each proposed component and the associated purchase price and the “not-to-exceed” monthly maintenance cost for year four (4). Unit costs must be given. A second set of additional pages (Section C) must be provided that detail any available options for the proposed solution and the maximum cost, or schedule of costs, at which the vendor will sell these products for the duration of the 3 year warranty period. The vendor can assume that all warranty will be co-terminus.

Incentives

The Commonwealth measures availability of sub-systems in the DataCenter on a monthly basis and meets with its vendors to discuss all outages. The required availability of the ATL and VTS is 99.7% as stated in Section 4.9. To provide an incentive for the vendor to propose sufficient redundancy and availability features as well as provide “top-flight” engineers and parts availability, the Commonwealth will require the successful vendor to add at least one month of “cost-free” warranty service, for all products proposed, for each month the ATL or VTS sub-systems fail to meet the required availability. Please see the availability definition elsewhere in this document.

COST SHEET Section A

1.	Total Purchase Price (inc. 3yr Hw/Sw Warranty)		\$_____
	Hardware Component	\$_____	
	Software Component	\$_____	
2.	Hardware Maintenance	\$_____ X 2 =	\$_____
	("Not-to-Exceed" For year 4)		
3.	Software Maintenance	\$_____ X 2 =	\$_____
	("Not-to-Exceed" For year 4)		
4.	Environment Costs from Worksheet	\$_____	
5	LESS Trade-In of Equipment	--(\$_____)	
	Total 5-year Cost	\$_____	
	Net Purchase Price (1 minus 5)		\$_____

NOTE:

Detailed Price Breakdowns must be attached.

COST SHEET Section B

Detail all proposed hardware and software:

Item	Description	Quantity	Unit Price	Extended Price	Monthly Maint (Year 4)	BTUs/Hr.
1.		_____	\$_____	\$_____	\$_____	_____
2.						
3.						
Totals				\$_____	\$_____	_____

COST SHEET Section C

Detail all available options:

ITEM	Description	Purchase Price	Monthly Maint (Year 4)
1.		\$_____	\$_____
2.			
3.			
Totals			

Environmental Cost WorkSheet

The Department of Information Technology wishes to determine an accurate 5 year “life-cycle” cost. One of the factors that the department has defined is the electrical cost associated with the operation of the proposed hardware. Based on historical information and the current costs of electricity, DIT has developed a formula that it believed closely approximates the accurate costs associated with the operation of its DataCenter components.

This worksheet calculates the environmental costs (electrical and cooling) for a period of 60 months based on a factor DIT has developed.

- | | | | |
|----|--|----|----------|
| 1. | Total number of BTUs per hour from Cost Sheet Section B. | | _____ |
| 2. | Conversion Factor | X | 0.143020 |
| 3. | Equals Environmetal Costs for One Year | \$ | _____ |
| 2. | Times Number of Years | X | 5 |
| 5. | Total Environment Cost for 60 months | \$ | _____ |

Note:

The environmental costs are used for calculation of a “life-cycle” cost and included for evaluation only. This amount is not paid to the vendor.

Section 8. Desirable Contractual Terms and Conditions

The following terms and conditions are desirable. The Contractor may propose alternative language, but the basic form of the Agreement shall be retained. Contractors are requested to limit their proposed changes, if any, to those of a substantive nature.

Section A - GENERAL PROVISIONS

1. SCOPE OF AGREEMENT

This is an agreement (the "Agreement") between the Commonwealth of Virginia ("Commonwealth") and _____ (the "Contractor"), a _____ corporation having its principal place of business at _____ for the purchase, delivery and installation of a "System" to include tape hardware and software including one or more automatic tape libraries, a virtual tape system, high-capacity tape drives, standalone 3490E drives and high-capacity cartridges (the "Product" or "Products"), along with any required support services (the "Services") pursuant to the Commonwealth's Request For Proposal #2001-025, (the "RFP") and the Contractor's proposal in response thereto.

2 ORDER OF PRECEDENCE

The documents comprising this Agreement, and their order of precedence in case of conflict, are: (1) all executed Orders and Attachments referencing this Agreement; (2) this document; (3) the Contractor's proposal if any, if submitted in response to a Request For Proposal ("RFP"); and (4) the Commonwealth's RFP, if any. The foregoing documents represent the complete and final agreement of the parties with respect to the subject matter of this Agreement.

3. EQUIPMENT CONDITION

All equipment to be supplied by Contractor shall be new equipment, except that used equipment may be delivered if it is clearly identified as such in the proposal and prior to delivery thoroughly inspected, repaired as necessary, and warranted as equivalent to new equipment. Contractor warrants that any such used equipment will be acceptable to the manufacturer under its standard equipment maintenance program and at standard rates. If such used equipment is subsequently not accepted for such maintenance, Contractor shall be responsible for all costs associated with expeditiously repairing, improving or upgrading such equipment to the level required by the manufacturer to make the equipment acceptable to the Contractor under its standard maintenance program. All new and used equipment proposed by Contractor must have been approved by Underwriters Laboratories or a recognized equivalent certification agency.

4 TERM

The initial Term of this Agreement shall commence at the final execution by both parties, and shall continue for delivery, installation, product acceptance, then for 36 months thereafter to include the On-site Warranty/Maintenance. At the sole discretion of the Commonwealth, the Term may be extended for three (3) one (1) year periods thereafter for continuing Warranty/Maintenance. The Contractor shall be provided with written documentation from the Commonwealth at least thirty (30) days prior to the beginning of any renewal period.

5. SITE PREPARATION

At least thirty (30) days prior to the scheduled delivery date, the Contractor shall provide the Commonwealth with any environmental specifications necessary to ensure the proper and efficient operation of all Products. All such specifications shall be in writing.

The Commonwealth shall prepare the site at its own expense and in accordance with all such environmental specifications.

Ten days prior to the scheduled delivery date, the Contractor shall, if Contractor deems it necessary, inspect the site and notify the Commonwealth in writing of any environmental inadequacies. In the absence of notification to the contrary, the Commonwealth's environment shall be deemed acceptable to the Contractor.

Any delay or additional site preparation expense caused in whole or in part by erroneous or incomplete environmental specifications shall be the Contractor's responsibility.

6. RECORDS

The Commonwealth shall maintain appropriate daily records documenting performance during the acceptance period and such records shall be conclusive for purposes of determining acceptance.

7. MOVEMENT OF EQUIPMENT

- a. Equipment may be moved from one Commonwealth location to another upon thirty (30) days written notice to the Contractor. Prior written notice shall not be required in case of emergency. Contractor shall continue to maintain the equipment as before, but if the Contractor has no facilities at the new location, the maintenance terms for the relocated equipment shall be equitably adjusted.
- b. Shipment to the new installation site shall be at the Commonwealth's expense by any appropriate mode of transportation selected by the Commonwealth. Contractor shall supervise packing, unpacking, and relocation of the equipment. Commonwealth shall compensate the Contractor for this service if the Contractor charges substantially all of its commercial customers for such services. If such charges are assessed, they will be at the Contractor's then current standard rates.

- c. Maintenance charges shall be suspended on the day that the equipment is dismantled in preparation for shipment and shall be reinstated when the Contractor certifies that the equipment is again ready for operational use. However, there shall be no suspension of charges if (a) the suspension period is less than 30 days or (b) the total charges to be suspended are less than \$500.00.
- d. There shall be no relocation charge to the Commonwealth in the event of transfer of licensed Software Product(s) to another location and the licensed Software Product (s) is to be discontinued at the old location.

8. ADDITIONS AND SUBSTITUTIONS

The Commonwealth may add or substitute memory, tape drives, terminals, or other equipment from any source. In such event, the following conditions are applicable:

- a. Contractor will be notified at least thirty (30) days in advance of such additions or substitutions.
- b. The Contractor shall be relieved of the obligations specified elsewhere in this Agreement to correct Product malfunctions and defects and provide credits to the Commonwealth if, and only if, the malfunction or defect results solely and directly from the use of equipment not supplied by the Contractor.
- c. If the addition or substitution made by the Commonwealth increases the cost of maintenance, an equitable adjustment in the maintenance charge shall be made.
- d. Maintenance charges for equipment replaced by substitutions shall be discontinued effective upon deinstallation of the equipment to be replaced.

9. ENGINEERING CHANGES

Contractor may make engineering changes with the consent of the Commonwealth, provided there is no additional charge for the change and the Commonwealth is able to schedule the change to avoid material impact upon the daily operations of the Commonwealth.

10. SUPPLIES

The Commonwealth may obtain paper, tape, and other supplies from any source. All such supplies shall conform to the Contractor's published specifications provided to the Commonwealth prior to execution of this Agreement.

11. COMMONWEALTH'S RESPONSIBILITIES DURING MAINTENANCE

- a. During any term of maintenance, Commonwealth personnel shall not perform maintenance or attempt repairs to the equipment except as authorized in writing by the Contractor.
- b. The Commonwealth shall permit access to the equipment which is to be maintained, subject to the installation site's security regulations,
- c. The Commonwealth may provide storage space for spare parts and working space, including heat, light, ventilation, electric current and outlets, and telephones (for local calls only) for the use of maintenance personnel.
- d. The Commonwealth shall maintain the site in accordance with the equipment environmental specifications furnished by the Contractor.

12. PREVENTIVE MAINTENANCE

The Contractor shall specify in writing the frequency and duration of the preventive maintenance required for the equipment ordered under this Agreement, and the Commonwealth shall specify the schedule for the performance of the preventive maintenance. This schedule may be modified by mutual agreement.

13. CONTRACTOR'S MAINTENANCE POINT OF CONTACT

The Contractor shall provide the Commonwealth with designated points of contact and make arrangements to enable its maintenance representative to receive such notification or other continuous telephone coverage to permit the Commonwealth to make such contact.

14. MALFUNCTION REPORTS

The Contractor shall furnish a signed malfunction incident report to the purchasing agency's operations manager upon completion of each maintenance call. The report shall, at a minimum include, the following:

- (a) Date and time notified
- (b) Date and time of arrival
- (c) Type and model number(s) of machine(s)
- (d) Date and time when equipment is returned to operation

- (e) Description of malfunction
- (f) Signature of Contractor representative
- (g) Signature of Commonwealth representative

15. ADDITIONAL MAINTENANCE CHARGES

The only items for which additional maintenance charges may be made are as follows:

- a. Replacement parts made necessary by abuse or negligence of the Commonwealth;

16. REPLACEMENT PARTS

The Contractor warrants that the availability of replacement parts for each Product shall be sustained for a minimum of seven (7) years following acceptance. This provision shall survive any termination of this Agreement.

17. MANUALS

Contractor shall supply an operations manual for each Product, subject to license limitations and in the case of custom-developed deliverables, shall also provide a manual describing the functions, characteristics and operating capabilities that may be expected of such deliverables.

PERSONS SIGNING THIS CONTRACT ARE AUTHORIZED REPRESENTATIVES OF EACH PARTY TO THIS CONTRACT AND ACKNOWLEDGE THAT EACH PARTY AGREES TO BE BOUND BY THE TERMS AND CONDITIONS OF THE CONTRACT.

CONTRACTOR

COMMONWEALTH OF VIRGINIA

BY:_____

BY:_____

NAME:_____

NAME: Jeff Davis

TITLE:_____

TITLE: Contracts Manager

DATE:_____

DATE:_____

Section 9: MANDATORY CONTRACTUAL TERMS AND CONDITIONS

The following terms and conditions are **MANDATORY** and shall be included verbatim in any contract awarded.

18. TAXES - FEDERAL, STATE AND LOCAL

The Commonwealth is exempt from Federal excise tax and from all State and local taxes. The Contractor shall not include such taxes in any invoices under this Agreement. Upon request, the Commonwealth shall furnish the Contractor with tax exemption certificates.

19. NON-APPROPRIATION

All Orders for Products and Services and all payment obligations under this Agreement are subject to appropriated funds being available for expenditure for that purpose. The Commonwealth shall promptly notify the Contractor of any action denying such funding. In such event, any outstanding Orders shall be canceled without further obligation to the extent the affected Products or Services have not yet been duly delivered and accepted.

If any purchases are to be supported by federal funding, and such funding is not made available, the Commonwealth may terminate the Orders for goods or services dependent on such Federal funds without further obligation.

20. GOVERNING LAW

This Agreement shall be deemed executed in Richmond, Virginia. This Agreement and any disputes arising under it shall be governed by the laws of the Commonwealth of Virginia. Any litigation arising in connection with this Agreement shall be brought in the courts of the Commonwealth of Virginia. The Contractor shall comply with all applicable federal, state and local laws, rules and regulations.

21. INTERPRETATION OF AGREEMENT

As used in this Agreement, "software" and "software product" shall include all related materials and documentation, whether in machine-readable or printed form.

Headings are for reference purposes only and shall not be considered in construing this Agreement.

If any term or condition of this Agreement is found to be illegal or unenforceable, it shall be severed, and the validity of the remaining terms and conditions shall not be affected.

Nothing in this Agreement shall be construed as an express or implied waiver of the Commonwealth's sovereign or Eleventh Amendment immunity, or as a pledge of its full faith and credit.

22. AMENDMENT AND WAIVER

No amendment of this Agreement shall be effective unless it is in writing and signed by a duly-authorized representative of each party. Under no circumstance shall any term or condition on or in any invoice, package, license or other Contractor-supplied document be effective unless signed by the Commonwealth's duly-authorized representative. No representative of the Commonwealth has authority to increase the price of a fixed-price contract by more than twenty-five percent of the contract price or \$50,000, whichever is greater, without the advance written approval of the Governor or his designee.

No waiver of, or consent to, any breach shall be effective unless expressly made in writing and signed by the waiving or consenting party's duly-authorized representative.

23. ANTI-DISCRIMINATION:

By submitting their (bids/proposals), (bidders/offerors) certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians with Disabilities Act, the Americans with Disabilities Act and § 11-51 of the Virginia Public Procurement Act.

In every contract over \$10,000 the provisions in 1. and 2. below apply:

1. During the performance of this contract, the contractor agrees as follows:
 - a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.
 - c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.
2. The contractor will include the provisions of 1. above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

24. CONTRACTUAL RECORDS

The Contractor shall make all contractual books and records and other documents relating to matters under this Agreement available to the Commonwealth and its designated agents for purposes of audit and examination for a period of five years after final payment.

Contractual records include, but are not limited to, this Agreement and all executed Orders, Attachments, modifications, invoices, and correspondence between the parties to this Agreement.

25. IMMIGRATION REFORM AND CONTROL ACT OF 1986:

By submitting their (bids/proposals), (bidders/offerors), certify that they do not and will not during the performance of this contract employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986.

26. ETHICS IN PUBLIC CONTRACTING:

By submitting their (bids/proposals), (bidders/offerors) certify that their (bids/proposals) are made without collusion or fraud and that they have not offered or received kickbacks or inducements from any other (bidder/offeror), supplier, manufacturer, or subcontractor, in connection with their (bid/proposal), and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan subscription, advance, deposit of money, services, or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.

27. PRIME CONTRACTOR RESPONSIBILITY

If the Contractor's proposal includes any goods or services to be supplied by another party, the Contractor agrees as follows:

- a. The Contractor shall act as prime contractor for the procurement and maintenance of the entire proposed configuration and shall be the sole point of contact with regard to all obligations under this Agreement.
- b. The Contractor hereby represents and warrants that the Contractor has made such other party aware of the proposed use and disposition of the other party's product or services, and that such other party has agreed in writing that it has no objection thereto.

28. ANTITRUST:

By entering into a contract, the contractor conveys, sells, assigns, and transfers to the Commonwealth of Virginia all rights, titles and interest in and to all causes of action it may now have or hereafter acquire under

the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Commonwealth of Virginia under said contract.

29. INFRINGEMENT ACTIONS

- a. Contractor, at its own expense, shall defend any suit brought against the Commonwealth for the infringement of patents, copyrights or trade secrets protected by state or federal law if the claim of infringement is alleged to relate to or arise from the Contractor's or Commonwealth's use of any equipment, software, materials or information prepared or developed in connection with performance of this Agreement. In such suit, Contractor shall satisfy any final award for any infringement.
- b. The purchasing agency shall notify the Contractor of such suit within a reasonable time after learning of it and shall give the Contractor the full right and opportunity to conduct the defense of the suit, subject however to the requirements of Sections 2.1-122 and 2.1-127 of the Code of Virginia or any successor statute. If principles of governmental or public law are involved, the Commonwealth may, at its option, participate in the defense of the suit.
- c. The Contractor shall not be required to indemnify the Commonwealth against any claim of infringement arising solely out of the Commonwealth's own specifications or design or solely from the combination of equipment or software furnished hereunder with any equipment or software not supplied by the Contractor.
- d. If, in the Contractor's opinion, any Product or Service is likely to or does become the subject of a claim of infringement, Contractor may, at its option, provide noninfringing substitutes that are satisfactory to the Commonwealth, or at Contractor's option and expense, may obtain the right for the Commonwealth to continue the use of such Product or Service.
- e. If the use of such equipment or software by the Commonwealth is prevented by permanent injunction or by Contractor's failure to procure the right for the Commonwealth to continue using the software, the Contractor agrees to take back the infringing equipment, software, materials or information and refund the total amount the Commonwealth has paid Contractor under this Agreement, less one and one half (1 1/2) percent of the total paid for each month of use by the Commonwealth. This obligation is in addition to the obligations cited in subparagraphs a. through d. of this Section entitled "Infringement Actions".

30. ASSIGNMENT

To the fullest extent permitted by law, the parties agree that Contractor's rights under this Agreement shall not be assignable, in whole or in part, to any other party without the Commonwealth's written consent, and that any purported assignment or transfer without such consent shall be null and void. If any law limits the right of the parties to prohibit assignment or nonconsensual assignments, the effective date of the assignment shall be as follows. The Contractor shall give the purchasing office prompt written notice of the assignment,

signed by authorized representatives of both the Contractor and the assignee. This written notice shall be on the Department of Information Technology's (DIT's) "Assignment Notice / Payment Instruction" form and shall provide all information requested on that form. Copies of the form may be obtained from the Contracts Manager DIT. Upon DIT's acknowledgment of receipt of the properly executed form, the Assignee shall notify the using agency or agencies receiving the goods or services of the assignment and shall supply the using agency with a copy of the properly executed form. Any payments made prior to the using agency's receipt of such notification and form shall not be covered by this assignment.

In the event the Commonwealth receives any notice from a third party claiming to be an assignee of any rights of the Contractor under this Agreement, Contractor agrees that payment or other performance in respect of those rights shall not be due until at least thirty days after the Commonwealth's receipt of the notice required by the above paragraph or receipt of a similarly executed notice confirming the absence or revocation of the purported assignment. The Acquisition Services Division of DIT shall promptly notify the Contractor of any assignment notice it receives.

31 CONTRACTUAL DISPUTES

In accordance with Section 11-69 of the Code of Virginia, Contractual claims, whether for money or other relief, shall be submitted in writing to the purchasing agency no later than sixty (60) days after final payment; however, written notice of the Contractor's intention to file such claim must be given to such agency at the time of the occurrence or beginning of the work upon which the claim is based. Pendency of claims shall not delay payment of amounts agreed due in the final payment. The purchasing agency shall render a final decision in writing within thirty (30) days after its receipt of the Contractor's written claim.

The contractor may not invoke any available administrative procedure under Section 11-71 of the Code of Virginia nor institute legal action prior to receipt of the purchasing agency's decision on the claim, unless that agency fails to render its decision within thirty (30) days. The decision of the purchasing agency shall be final and conclusive unless the Contractor, within six (6) months of the date of the final decision on the claim, invokes appropriate action under Section 11-70, Code of Virginia or the administrative procedure authorized by Section 11-71, Code of Virginia.

The Department of Information Technology, its officers, agents and employees, including, without limitation, the Contracts Manager, are executing this Agreement and any Orders issued hereunder, solely in its or their statutory and regulatory capacities as agent for the Commonwealth agency purchasing and receiving the goods or services identified in Attachment "A" to this Agreement or on the subsequent Order in question and need not be joined as a party to any dispute that may arise thereunder.

In the event of any breach by the Commonwealth, Contractor's remedies shall be limited to claims for damages and Prompt Payment Act interest and, if available and warranted, equitable relief, all such claims to be processed pursuant to this Section. In no event shall Contractor's remedies include the right to terminate any license or support services hereunder.

32. INVOICES

All invoices shall be rendered promptly after all Products and Services covered by the invoice have been accepted. All payments for maintenance services shall be monthly in arrears unless otherwise stated in an Order or Attachment to this Agreement. No invoice may include any costs other than those identified in the executed Order or Attachment referencing this Agreement. Without limiting the foregoing, all shipping costs are the Contractor's responsibility, except to the extent such charges are identified on the executed Order or Attachment. Invoices shall provide at a minimum:

1. Type and description of the Product or Service;
2. Serial number, if any;
3. Charge for each item, and;
4. The Agreement Number or Order Number;
5. Contractor's Federal Identification Number (FIN);

Payment for maintenance services of less than one month's duration shall be prorated at 1/30th of the basic monthly charges for each calendar day.

33. PROMPT PAYMENT

Payment shall be due within thirty (30) days after (1) acceptance of all Products or Services, (2) receipt of a correct invoice for such payment, and (3) when applicable, receipt of the payment instruction form referenced in the Section entitled ("Assignments"), whichever is latest. Where payment is made by mail, the date of postmark shall be deemed to be the date of payment. Any amounts due the Commonwealth under the terms of this Agreement may be applied against Contractor's invoices with appropriate information attached.

In accordance with the Virginia Public Procurement Act, all proper charges for which payment is more than seven (7) days overdue shall accrue interest as provided in Sections 11-62.1 through 11-62.9 of the Code of Virginia. The rate of interest shall be determined in accordance with Section 11-62.5 of the Code of Virginia. In no event shall any interest penalty accrue, however, when payment is delayed because of a disagreement between the Commonwealth and the Contractor regarding the quantity, quality or time of delivery of any Product or Service or the accuracy or correctness of any invoice. The Contractor shall notify the fiscal officer of the purchasing agency or institution of all invoices that are in excess of thirty (30) days old.

34. PAYMENTS TO SUBCONTRACTORS

In accordance with Section 11-62.11 of the Code of Virginia, within seven days after receipt of amounts paid to the Contractor by the Commonwealth for work performed by a subcontractor, the Contractor shall

- a. pay the subcontractor for the proportionate share of the total payment received from the agency attributable to the work performed by the subcontractor, or
- b. notify the agency and subcontractor, in writing, of the Contractor's intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.

The contractor shall pay interest to the subcontractor on all amounts owed by the Contractor that remain unpaid after seven days following receipt by the Contractor of payment from the Commonwealth for work performed by the subcontractor, except for amounts withheld as allowed in (b) above. The Contractor shall provide its federal employer identification number (or social security number, if Contractor is an individual) to the Commonwealth as required by Section 11-62.11(2) of the Code of Virginia. Unless otherwise provided under the terms of this contract, interest shall accrue at the rate of one percent per month. The Contractor shall include in each of its subcontracts a provision requiring each subcontractor to be subject to the same payment and interest requirements with respect to each lower-tier subcontractor. Nothing in this paragraph shall be construed as creating any obligation on the part of the Commonwealth or as authorizing any additional charge to the Commonwealth.

35. QUALIFICATIONS OF (BIDDERS/OFFERORS):

The Commonwealth may make such reasonable investigations as deemed proper and necessary to determine the ability of the (bidder/offeror) to perform the services/furnish the goods and the (bidder/offeror) shall furnish to the Commonwealth all such information and data for this purpose as may be requested. The Commonwealth reserves the right to inspect (bidder's/offeror's) physical facilities prior to award to satisfy any questions regarding the (bidder's/offeror's) capabilities. The Commonwealth further reserves the right to reject any (bid/proposal) if the evidence submitted by, or investigations of, such (bidder/offeror) fails to satisfy the Commonwealth that such (bidder/offeror) is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.

36 BREACH

The Contractor shall be deemed in breach of this Agreement if the Contractor (a) fails to make any Product or Service ready for acceptance testing by the specified delivery date; (b) repeatedly fails to respond to requests for maintenance or other required service within the time limits set forth in this Agreement; (c) fails to comply with any other term of this Agreement and fails to cure such noncompliance within ten days (or such greater period as is acceptable to the Commonwealth) following Contractor's receipt of a Show Cause Notice identifying such noncompliance; or (d) fails to provide a written response to the Commonwealth's Show Cause Notice within ten days after receiving same.

The Contractor shall not be in breach of this Agreement if its default was due to causes beyond the reasonable control of, and occurred without any fault or negligence on the part of, both the Contractor and its subcontractors. Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of the Commonwealth in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather.

In the event of breach, in addition to any other remedies provided by law, the Commonwealth may cancel its obligations with respect to any or all unaccepted Products or Services. All costs for deinstallation and return of Products shall be borne by the Contractor. In no event shall any failure by the Commonwealth to exercise any remedy available to it be construed as a waiver of or consent to any breach.

37. LIABILITY

To the maximum extent permitted by applicable law, the contractor will not be liable under this contract for any indirect, incidental, special or consequential damages, or damages from loss of profits, revenue, data or use of the supplies, equipment and or services delivered under this contract. This limitation of liability will not apply, however, to liability arising from: (a) personal injury or death; (b) defect or deficiency caused by willful misconduct or negligence on the part of the contractor; or (c) circumstances where the contract expressly provides a right to damages, indemnification or reimbursement.

38. INSURANCE

By signing and submitting a bid under this solicitation, the bidder certifies that if awarded the Contract, it will have the following insurance coverages at the time the Contract is awarded. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with §§ 11-46.3 and 65.2-800 et seq. of the Code of Virginia. The bidder further certifies that the Contractor and any subcontractors will maintain these insurance coverages during the entire term of the Contract and that all insurance coverages will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.

INSURANCE COVERAGES AND LIMITS REQUIRED:

1. Worker's Compensation – Statutory requirements and benefits; require that the Commonwealth of Virginia be added as an additional named insured on Contractor's policy.
2. Employers Liability - \$100,000.
3. Commercial General Liability - \$500,000 combined single limit. Commercial General Liability is to include Premises/Operations Liability, Products and Completed Operations Coverage, and Independent Contractor's Liability or Owner's and Contractor's Protective

Liability. The Commonwealth of Virginia must be named as an additional insured when requiring a Contractor to obtain Commercial General Liability coverage.

4. Automobile Liability - \$500,000 – Combined single limit. (Only if motor vehicle is to be used in the contract.)

39. NONVISUAL ACCESS TO TECHNOLOGY:

All information technology which, pursuant to this Agreement, is purchased or upgraded by or for the use of any State agency or institution or political subdivision of the Commonwealth (the “Technology”) shall comply with the following nonvisual access standards from the date of purchase or upgrade until the expiration of this Agreement:

(i) effective, interactive control and use of the Technology shall be readily achievable by nonvisual means;

(ii) the Technology equipped for nonvisual access shall be compatible with information technology used by other individuals with whom any blind or visually impaired user of the Technology interacts;

(iii) nonvisual access technology shall be integrated into any networks used to share communications among employees, program participants or the public: and

(iv) the technology for nonvisual access shall have the capability of providing equivalent access by nonvisual means to telecommunications or other interconnected network services used by persons who are not blind or visually impaired.

Compliance with the foregoing nonvisual access standards shall not be required if the head of the using agency, institution or political subdivision determines that (I) the Technology is not available with nonvisual access because the essential elements of the Technology are visual and (ii) nonvisual equivalence is not available.

Installation of hardware, software, or peripheral devices used for nonvisual access is not required when the Technology is being used exclusively by individuals who are not blind or visually impaired, but applications programs and underlying operating systems (including the format of the data) used for the manipulation and presentation of information shall permit the installation and effective use of nonvisual access software and peripheral devices.

If requested, the Contractor must provide a detailed explanation of how compliance with the foregoing nonvisual access standards is achieved and a validation of concept demonstration.

The requirements of this Paragraph shall be construed to achieve full compliance with the Information Technology Access Act, 2.1-807 through 2.1-811 of the Code of Virginia.

40. PERIODIC PROGRESS REPORTS/INVOICES

For contracts requiring the submission of periodic contract performance progress reports or program status reports, the offeror will include a section on involvement of small businesses and businesses owned by women and minorities. This section will specify the actual dollars contracted to-date with such businesses, actual dollars expended to-date with such businesses and the total dollars planned to be contracted for with such businesses on this contract. This information shall be provided separately for small businesses, minority-owned businesses and women-owned businesses.

If the contract does not require the submission of periodic progress reports, the offeror will provide the above required information on actual involvement of small businesses and businesses owned by minorities and women as part of their periodic invoices.

41. FINAL ACTUAL INVOLVEMENT REPORT

The contractor will submit, prior to completion or at completion of the contract and subject to final payment, a report on the actual dollars spent with small businesses and businesses owned by women and minorities during the performance of the contract. At a minimum, this report shall include for each firm contracted with and for each such business class (i.e., small, minority-owned, women-owned) the total actual dollars spent on this contract, the planned involvement of the firm and business class as specified in the proposal, and the actual percent of the total estimated contract value. A suggested format is as follows:

FIRM NAME

ADDRESS AND PHONE NUMBER	TYPE GOODS/ SERVICES	ACTUAL DOLLARS	PLANNED DOLLARS	% OF TOTAL CONTRACT
-----------------------------	-------------------------	-------------------	--------------------	------------------------

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Totals for Business Class _____ _____ _____

42. BUY OUTS - THIRD PARTY ACQUISITION OF CONTRACTOR'S SOFTWARE

Contractor shall promptly notify the DIT Contracts Manager in the event that the intellectual property in or business associated with any Product or Service covered by this Agreement is acquired from the Contractor by a third party or in the event the Contractor or substantially all of its assets is acquired by a third party.

The terms and conditions of this Agreement including but not limited to the license rights and related services shall not be affected in such event identified above even if the successor or assignee already has an agreement with the Commonwealth covering products and services of the type covered by this Agreement. The Contractor's responsibilities under this Agreement shall not be released by such acquisition. In

addition, prior to any acquisition, Contractor shall obtain for the Commonwealth's benefit the assignee's agreement to fully perform this Agreement.

The successor or assignee, by taking any benefit, including acceptance of payment, under this Agreement ratifies this Agreement.

The failure of any successor or assignee of the Contractor to acknowledge its obligation to adhere to the terms and conditions of this Agreement shall constitute a breach of this Agreement for which the successor or assignee and the original Contractor shall be liable and subject to debarment.

43. RISK OF LOSS

The Contractor shall have the risk of loss or damage to all equipment until properly delivered and received by the end user.

44. AVAILABILITY OF EQUIPMENT AND SOFTWARE

The Contractor represents and warrants that all Products were formally announced for marketing purposes before execution of this Agreement or, in the case of subsequent Orders, before execution of such Orders.

45 COMPLIANCE WITH FEDERAL LOBBYING ACT

- a. Contractor shall not, in connection with this Agreement, engage in any activity prohibited by 31 U.S.C.A. Section 1352 (entitled "Limitation on use of appropriated funds to influence certain Federal contracting and financial transactions") or by the regulations issued from time to time thereunder (together, the "Lobbying Act"), and shall promptly perform all obligations mandated by the Lobbying Act in connection with this Agreement, including, without limitation, obtaining and delivering to the Commonwealth all necessary certifications and disclosures.
- b. Contractor is hereby advised that a significant percentage of the funds used to pay Contractor's invoices under this Agreement may be federal funds. Under no circumstances shall any provision of this Agreement be construed as requiring or requesting the Contractor to influence or attempt to influence any person identified in 31 U.S.C.A. Section 1352 (a) (1) in any matter.
- c. A representative of Contractor shall sign the certification attached as Attachment "B" and deliver such certification to the Commonwealth simultaneously with the execution and delivery of this Agreement. Contractor shall have the certification signed by a representative with knowledge of the facts and shall fulfill the promises of undertakings set forth in the certification.

46. MODIFICATIONS

This contract may be modified in accordance with Section 11-55 of the Code of Virginia. Such modifications may only be made by the representatives noted below. No modifications to this contract shall

be effective unless it is in writing and signed by the duly authorized representative of both parties. No term or provision hereof shall be deemed waived and no breach excused unless such waiver or consent to breach is in writing. For purposes of the contract, the only authorized representative for the Commonwealth shall be the individual identified below.

Any contract issued on a firm fixed price basis may not be increased more than twenty five percent (25%) or \$50,000.00 whichever is greater, without the approval of the Governor of the Commonwealth of Virginia or his authorized designee.

CONTRACTOR

COMMONWEALTH OF VIRGINIA

Contracts Manager
Dept. of Information Technology
Richmond Plaza Bldg.,Lobby Level
110 South 7th Street
Richmond, VA 23219

47. WARRANTY -PERFORMANCE BASED

The Contractor is required to provide a 36 month On-Site Warranty for the System (System = all components, including software and firmware, and hardware, that when installed function as a complete System). The price shall be as quoted in the Contractor's response to RFP 2001-025. This On-Site Warranty shall commence after Product Acceptance as defined herein. "Priority One" System failures shall be responded to within thirty (30) minutes by the Contractor via telephone. An On-Site response is required within two (2) hours after notification to the Contractor of a failure. This On-Site Warranty is provided 24 hours per day, 7 days per week, 365 days per year, by the Contractor.

48. COMMENCEMENT OF ACCEPTANCE TESTING

The Products shall be considered ready for testing when the Contractor provides the Commonwealth with the documentation of a successful system audit or diagnostic test performed at the site which demonstrates, to the satisfaction of the Commonwealth, that all Products meet the minimum design capabilities specified by Contractor. If the Contractor certifies that the Products are ready to begin acceptance testing prior to the scheduled delivery date, the Commonwealth, at its option, may elect to test the Products and change the delivery date accordingly. Acceptance Test criteria are identified in Section 4.13 entitled "Acceptance Test", in RFP 2001-025.

49. REQUIRED PERFORMANCE LEVEL FOR ACCEPTANCE

To qualify for acceptance, all Products must concurrently perform in accordance with the technical specifications and functional descriptions, as contained or referenced in this Agreement and as delineated in section 4.13 entitled "Acceptance Test" in RFP-2001-025. The Commonwealth shall not pay any charges, either beforehand or retroactively, associated with the Contractor's requirement to achieve this

performance level. If any Product does not meet the standard of performance during the initial thirty (30) consecutive days, the acceptance period shall continue on a day-to-day basis until all Products concurrently meet the standard of performance for thirty (30) consecutive days.

Should it be necessary, the Commonwealth may delay the start of the acceptance period, but such a delay shall not exceed thirty (30) consecutive days.

50. ACCEPTANCE

The Products shall be deemed accepted on the first day after successful completion of the acceptance period. Upon request, the Commonwealth shall provide written confirmation of acceptance. If the standard of performance has not been met after ninety (90) calendar days have elapsed from the start of the acceptance period, the Commonwealth may require a replacement to be provided or may avail itself of the remedies for breach

51. REQUIRED PRERFOMANCE LEVEL AFTER ACCEPTANCE

Subsequent to product acceptance, the System must comply with section 4.9, entitled “Availability” of RFP 2001-025. The Contractor will propose equipment that will meet or exceed the performance specifications as delineated in section 4.9. For any monthly occurrence whereby the equipment performance fails to perform to at least 99.7% as stated in section 4.9, the Contractor will provide an additional month of On-Site warranty / maintenance at no cost to the Commonwealth. The additional month/s of warranty /maintenance shall be provided under the same terms and conditions as stated in RFP 2001-025 and be available at the end of the 36 month warranty / maintenance period that is included in the price identified in the price Schedule, herein.

52. DRUG-FREE WORKPLACE

During the performance of this Contract, the Contractor agrees to (i) provide a drug-free workplace for the Contractor’s employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor’s workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the forgoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

“Drug-free workplace” means a site for the performance of work done in connection with this Contract, wherein the Contractor’s employees are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession, or use of any controlled substance or marijuana during the performance of the Contract.

53. OPERATIONAL RESTRICTIONS

Contractor warrants that, except as specifically agreed in writing all Products may be operated at any time for the convenience of the Commonwealth (exclusive of time required for preventive maintenance, remedial maintenance and approved engineering changes). Without limiting the foregoing, Contractor warrants that there are no restrictions as to consecutive hours or length of personnel shifts. The Commonwealth may make the Products available to any Commonwealth agency or any other users under conditions where such use is supervised by the Commonwealth.

54. ON-SITE MAINTENANCE OF EQUIPMENT

In this Agreement "ON-SITE Maintenance" of equipment shall mean: (1) all labor, parts and travel necessary to keep the equipment in good operating condition and preserve its operating efficiency in accordance with its technical specifications; and (2) Any necessary shipment and insurance costs.

ON-SITE Maintenance of equipment shall not include electrical work external to the equipment, the furnishing of supplies, or adding or removing accessories, attachments, or other devices not provided under this Agreement. ON-SITE Maintenance of equipment also shall not include repair of damage resulting from transportation by the Commonwealth between Commonwealth sites or from accident, unless the accident is caused by negligent or intentional acts or omissions of Contractor or its agents.

The ON-SITE maintenance prices listed in this Agreement include cost of labor, parts, travel, factory overhaul, rehabilitation, transportation and substitute equipment as necessary. In those instances where it is necessary for the Contractor to return the equipment to the factory, the Contractor shall be responsible for all costs of the equipment from the time it leaves the Commonwealth site until it is returned to the Commonwealth site in good operating condition. Only new standard part or parts equal in performance to new parts shall be used in effecting repairs. Parts which have been replaced shall become the property of the Contractor. Replacement parts installed shall become the property of the Commonwealth.

55. PRINCIPAL PERIOD OF WARRANTY / MAINTENANCE

The Principal Period of Maintenance (PPM), for all On-Site responses to both Warranty and Maintenance shall be twenty-four (24) hours per day, seven days per week, 365 days per year. The Commonwealth, by giving fifteen (15) days written notice to the Contractor, may designate different hours or days for the PPM. If this option is exercised, the maintenance charge shall be adjusted up or down by an amount equal to the difference between the Contractor's then current charges for the existing coverage and newly designated coverage.

56. RESPONSE TIME

During the PPM, the Contractor shall provide all On-Site Warranty / Maintenance service within a two (2) hour response time. For Priority One System failures, the Contractor shall respond within 30 minutes via telephone in addition to the requirements of an On-Site 2 hour response.

57. TERM OF WARRANTY / MAINTENANCE

Beginning on the date of acceptance, Contractor shall furnish thirty-six (36) months of On-Site Warranty / Maintenance for all equipment / software purchased under this Agreement, and to System requirements which is the working combination of all components.

Upon expiration of the initial thirty-six month period, the Contractor shall provide On-Site Warranty / Maintenance of equipment / Software for one year additional period at such prices as are listed in the schedule, RFP 2001-025. The prices for additional Warranty / Maintenance for years 5 and 6 shall be in accordance with the Contractor's price of year 4 as set forth in the schedule, plus increases as governed by the CPI-W index entitled "Other Services". The percentage increase shall not exceed the above index's most recent percentage available to the Commonwealth as published by the Bureau of Labor Statistic's, Philadelphia Office. If maintenance prices remain the same or decrease for succeeding years, the State shall be afforded the opportunity to renew the maintenance services at the lowest price available to any other customer.

58. TRAINING

The Contractor shall provide training as delineated in section 4.12 of RFP 2001-025.

59. LICENSED SOFTWARE

The Contractor represents and warrants that it is the sole owner of each software Product or, if not the owner, has received all proper authorizations from the owner to license each software Product, and has the full right and power to grant the rights contained in this Agreement. Contractor further represents and warrants that neither the software Product nor its use will violate or infringe any patent, copyright, trade secret or other property right of any other person.

60. TERM OF LICENSE

All licenses granted under this Agreement are purchased on a non-exclusive, irrevocable perpetual license basis and shall commence upon the acceptance of the software Product by the Commonwealth. Notwithstanding the foregoing, the Commonwealth may terminate the license at anytime. All licenses granted to the Commonwealth are for the use of the software Product at the Commonwealth's computing facilities at the sites identified in any executed Attachment or Order referencing this Agreement. This license is perpetual and in no event shall Contractor's remedies for any breach of this Agreement include the right to terminate any license or support services hereunder.

61. CONFIDENTIALITY

Commonwealth agrees that when the Software Product is proprietary to Contractor and has been developed or acquired at Contractor's expense, that it shall hold and use the Software Product in the same

manner as it would deal with its own confidential information. Commonwealth shall not knowingly divulge, nor knowingly permit any of its employees, agents, or representatives to divulge, any proprietary information with respect to the Software Product, the technology embodied therein, or any other documentation, models, descriptions, forms, instructions or other proprietary information relating thereto, except as specifically authorized by Contractor, in writing, or as may be required by the laws of the Commonwealth of Virginia.

Commonwealth shall take all reasonable steps necessary or appropriate to insure compliance with this Section by the Commonwealth's employees, agents and representatives, including copying reproducible legends and markings on all physical components of the Software Product.

The Commonwealth's obligation under this Section G.3 shall terminate three years after the Commonwealth ceases using the Software Product containing the proprietary information.

62. SOFTWARE UPGRADES

The Commonwealth shall be entitled to receive any and all upgraded versions of the Software Product that Contractor may make available in the future including any third party Software Product provided by the Contractor under this Agreement. The maximum charge to the Commonwealth shall not exceed the difference between the price which the Commonwealth paid for the present version, and the lowest price at which the Contractor has sold or licensed the upgraded version.

63. DISPOSITION OF SOFTWARE

Unless otherwise instructed by the Contractor, the State shall erase, destroy or otherwise render unusable the Software Product within thirty (30) days from the date of the Commonwealth's termination of the license. A letter certifying this destruction shall be sent to the Contractor as soon as this process is completed. The Commonwealth shall have the right to retain one copy for archival purposes.

64. COMMONWEALTH'S RIGHTS TO COMPUTER SOFTWARE

Notwithstanding anything to the contrary in this Agreement, the Commonwealth shall have:

- a. Unlimited use of the Software Products on the machines for which it is acquired and on any replacement equipment;
- b. Use of such Software Products with a backup system if the system(s) for which it was acquired is for any reason, inoperative or during an emergency, or the performance of engineering changes in features or model;
- c. The right to use such Software Products at any Commonwealth installation to which the machine(s) may be transferred by the Commonwealth;

- d. The right to copy such software for safekeeping or backup purposes;
- e. The right to modify such Software Product or combine it with other programs or material at the Commonwealth's risk; and
- f. The Commonwealth shall have the right to reproduce any and all physical documentation supplied under the terms of this Agreement, provided, however, that such reproduction shall be for the sole use of the Commonwealth and shall be subject to the same restrictions or use and disclosure as are contained elsewhere in this Agreement, or as limited by the license.

Nothing contained herein shall be construed to restrict or limit the Commonwealth's rights to use any technical data which the Commonwealth may already possess or acquire under proper authorization from other sources.

65. SOFTWARE WARRANTY

Contractor warrants the operation of the Software Product identified in this Agreement for a minimum of thirty-six (36) months after Product acceptance. Software Products which fail to operate in accordance with the Contractor's Proposal or published specifications will be returned, at Contractor's expense, for replacement. Contractor agrees to replace any non-conforming Software Product within five (5) calendar days after receipt of the returned Software Products. Warranty service shall include, but not necessarily be limited to, detection and correction of errors, updating of all Software Products to operate with all updated or revised versions of the operating systems for which the Software Product is licensed, and provision of enhancements to the Software Product as they are generally made available. Warranty charges shall include unlimited telephonic support and all travel, labor, and documentation necessary to maintain the Products in accordance with Contractor's published specifications.

66. SOFTWARE SUPPORT

When requested by the Commonwealth, the Contractor shall always be responsive to maintenance requirements of the Commonwealth. Maintenance service shall include, but not necessarily be limited to, detection and correction of errors, updating of all Software Products to operate with all updated or revised versions of the operating systems for which the Software Product is licensed, and provision of enhancements to the Software Product as they are generally made available, problem reporting, product functionality or addressing questions from the users. Maintenance charges shall include all software documentation and 24 x 7 telephone support and electronic support. The Commonwealth shall have the option of purchasing, at later dates, additional one (1) year periods of maintenance and support for years 5 and 6 based on year 4 price as quoted by the Contractor in the schedule of RFP 2001-025 plus increases as governed by the CPI-W index entitled "Other Services". The percentage increase shall not exceed the above index's most recent percentage available to the Commonwealth as published by the Bureau of Labor Statistics, Philadelphia Office. If maintenance prices remain the same or decrease for succeeding year, the State shall be afforded the opportunity to renew the maintenance services at the lowest price

available to any other customer. The ability to increase maintenance fees by the allowable amount shall not begin until completion of the second year of warranty/maintenance and support services.

67. WARRANTY AGAINST SHUTDOWN DEVICES

Contractor warrants that the Products provided under this Agreement shall not contain any lock, counter, CPU reference, virus, worm or other device capable of halting operations or erasing or altering data or programs. Contractor further warrants that neither the Contractor, nor its agents, employees or subcontractors shall insert any such device after execution of this Agreement.

68. DISASTER RECOVERY

By executing this Agreement, Contractor hereby authorizes the Commonwealth to operate Contractor's licensed software products identified in this Agreement at other location(s) for purposes of disaster recovery and disaster recovery testing. In addition, Contractor recognizes that to prepare for such an event the Commonwealth must test the Contractor's software product (normally for a periods of two to three days, twice annually) at a disaster recovery vendor's Cold Site. The use of Contractor's software products by the Commonwealth, at such times and under such events will be in accordance with the terms and conditions of this Agreement. Contractor agrees that there shall be no additional charge to the Commonwealth when Contractor's software products are used during an actual disaster or for disaster recovery testing.

69. TITLE TO EQUIPMENT

Clear and unrestricted title to all equipment purchased under this Agreement shall pass to the Commonwealth upon payment of the purchase price.

70. INSTALLATION RESPONSIBILITY

Except where otherwise expressly provided, "delivery" includes installation and delivery shall not be complete until, the Contractor completes installation of all Products, including, without limitation, shipping FOB destination, all unpacking, positioning and connection of such Products with internal utility services, ready for acceptance testing. All equipment installations shall comply with building and facilities standards established by the Commonwealth.

ATTACHMENT "A"
TO
AGREEMENT VA-98XXXX-XYZ
FOR THE
VIRGINIA DEPARTMENT OF X

Attachment "A" is hereby incorporated into and made an integral part of Agreement Number VA-98XXXX-XXX between XYZ and the Commonwealth of Virginia.

CONTRACTORS DO NOT ADD ANY INFORMATION TO THIS ATTACHMENT "A" AT THIS TIME. THIS ATTACHMENT WILL BE COMPLETED DURING CONTRACT NEGOTIATIONS BETWEEN THE PARTIES TO THIS AGREEMENT.

LISTING OF ALL PRODUCT PRICES

LISTING OF ALL PRODUCT MAINTENANCE PRICES

SHIP TO BILL TO ADDRESSES

DELIVERY SCHEDULE

AGENCY POINTS OF CONTACT

ATTACHMENT "B"
TO
AGREEMENT VA-98XXXX-XXX
FOR THE
VIRGINIA DEPARTMENT OF X

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee or an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

c. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Signature:_____

Printed Name:_____

Organization:_____

Date:_____

APPENDIX A SWAM Instructions

**INSTRUCTIONS FOR PROVIDING INFORMATION PERTAINING TO
CONTRACTS WITH AND PLANNED INVOLVEMENT OF SMALL BUSINESSES
AND BUSINESSES OWNED BY WOMEN AND MINORITIES**

The offeror must submit the following three sets of data for small business, women-owned business and minority-owned business:

(1) Ownership; (2) utilization of small, women-owned, and minority-owned businesses for the most recent 12 months; and (3) planned involvement of small businesses, women-owned businesses and minority-owned businesses on the instant procurement.

1. Participation by Small Business:

a. Offeror certifies that it () is, () is not, a small business concern, including its affiliates, which is independently owned and operated, is not dominant in the field of operation in which it is contracting and can further qualify under the criteria concerning number of employees, average annual receipts, or other criteria, as prescribed by the United States Small Business Administration.

b. List small business with which the Offeror has contracted or done business and dollar amounts spent with each of these businesses in the most recent 12-month period for which data are available. Offerors are encouraged to provide additional information and expand upon the following format:

PERIOD: From _____ To: _____

FIRM NAME, ADDRESS & PHONE NO.	CONTACT PERSON	TYPE GOODS/ SERVICES/DOLLARS	% TOTAL CO. EXPENDITURES FOR GOODS & SERVICES
--------------------------------------	-------------------	---------------------------------	--

c. Describe offeror's plans to involve small businesses in the performance of this contract either as part of a joint venture, as a partnership, as subcontractors or as suppliers. Offerors are encouraged to provide additional information and expand upon the following format:

FIRM NAME	% OF TOTAL
-----------	------------

ADDRESS & PHONE NO.	CONTACT PERSON	TYPE GOODS/ SERVICES/DOLLARS	CONTRACT DOLLARS
------------------------	-------------------	---------------------------------	---------------------

2. Participation by Businesses Owned by Women:

a. Offeror certifies that it () is, () is not, a women's business enterprise or women-owned business. For the purpose of this procurement, a women-owned business is a concern that is at least 51 percent owned by a woman or women who also control and operate it. In this context, "control" means exercising that power to make policy decisions, and "operate" means being actively involved in the day-to-day management.

b. List businesses owned by women with which the offeror has contracted or done business and dollar amounts spent with each of these businesses in the most recent 12-month period for which data are available. Offerors are encouraged to provide additional information and expand upon the following format:

PERIOD: From _____ To: _____

FIRM NAME, ADDRESS & PHONE NO.	CONTACT PERSON	TYPE GOOD/ SERVICES/DOLLARS	% OF TOTAL CONTRACT DOLLARS
--------------------------------------	-------------------	--------------------------------	-----------------------------------

c. Describe Offeror's plans to involve businesses owned by women in the performance of this contract either as part of a joint venture, as a partnership, as subcontractors or as suppliers. Offerors are encouraged to provide additional information and expand upon the following format:

FIRM NAME, ADDRESS/ PHONE NO.	CONTRACT PERSON	TYPE GOODS/ SERVICES	% OF TOTAL DOLLARS	CONTRACT
-------------------------------------	--------------------	-------------------------	-----------------------	----------

3. Participation of Businesses Owned by Minorities:

a. Offeror certifies that it () is, () is not, a minority business enterprise of minority-owned business. For the purpose of this procurement, a minority-owned business is a concern that is at least 51% owned and controlled by one or more socially and economically disadvantaged persons. Such disadvantage may arise from cultural, racial, chronic economic circumstances or background or other similar cause. Such persons include, but are not limited to Blacks, Hispanic Americans, Asian Americans, American Indians, Eskimos, and Aleuts.

b. List businesses owned by minorities with which the Offeror has contracted or done business and dollar amounts spent with each of these businesses in the most recent 12-month period for which data are available. Offerors are encouraged to provide additional information and expand upon the following format:

PERIOD:

From _____ To: _____

FIRM NAME, ADDRESS / PHONE NO.	CONTACT PERSON	TYPE GOODS/ SERVICES/DOLLARS	% TOTAL CO. EXPENDITURES FOR GOODS & SERVICES
--------------------------------------	-------------------	---------------------------------	--

c. Describe Offeror's plans to involve minority businesses in the performance of this contract either as part of a joint venture, as a partnership, as subcontractors or as suppliers. Offerors are encouraged to provide additional information and expand upon the following format:

FIRM NAME, ADDRESS & PHONE NO.	CONTRACT PERSON	TYPE GOODS/ SERVICES	% OF TOTAL CONTRACT
--------------------------------------	--------------------	-------------------------	------------------------

Definitions for Goods and Nonprofessional Services

- a. **Period** is the specified 12-month period for which the information provided in this list is applicable and valid. The period will be specified as month and year.
- b. **Firm Name, Address and Phone Number** is the name, address and business of minority-owned business with which the Offeror plans to involve in this contract, as applicable.
- c. **Contact Person** is the name of the individual in the specified small business, women-owned business or minority-owned business who would have knowledge of the specified contracting and would be able to validate the information provided in this list.
- d. **Type Goods or Services** is the specific goods or services the Offeror has contracted for from the specified small, women-owned or minority-owned business over the specified period of time or plans to use in the performance of this contractor, as applicable. The Offeror will asterisk (*) those goods and services that are in the Offeror's primary usiness or industry.
- e. **Dollar Amount** is the total dollar amount (in thousands of dollars) the Offeror has contracted for or has done business with the listed firm during the specified period or plans to use on this contract, as applicable.
- f. **%Total Company Expenditures for Goods and Services** is calculated by dividing the dollar amount of business conducted or contracted for with the indicated firm over the specified period by the total expenditure of the Offeror over the specified period for goods and services.
- g. **% of Total Contract** is calculated by dividing the estimated dollars planed for the indicated firm on this contract by the total Offeror estimated price of this contract.

For the purposes of this RFP only, in the item "% of Total Contract" on the "Planned Involvement" forms, the total estimated price of this contract will be the Offeror's prices for all stated **mandatory services with specified volumes during a three-year period**. The cost of such services **without** specified volumes and the cost of **optional** services will not be included.

APPENDIX B SWAM Forms

DEPARTMENT OF INFORMATION TECHNOLOGY

ACQUISITION SERVICES DIVISION

SAMPLE FORMS FOR PROVIDING INFORMATION PERTAINING TO
CONTRACTS WITH AND PLANNED INVOLVEMENT OF SMALL BUSINESSES
AND BUSINESSES OWNED BY WOMEN AND MINORITIES

CONTRACTS WITH SMALL BUSINESSES

PERIOD: From _____ To _____

% Total Co.
Expenditures:

<u>Firm Name, Address & Phone Number</u>	<u>Contact Person</u>	<u>Amount for Goods & Services</u>	<u>Type Goods & Services</u>
--	---------------------------	--	--------------------------------------

OFFEROR CERTIFIES THAT IT () IS, () IS NOT A SMALL BUSINESS CONCERN

OFFEROR: _____

RFP # _____

**PLANNED INVOLVEMENT OF SMALL BUSINESSES IN PERFORMANCE OF THIS
CONTRACT**

Firm Name, Address & Phone Number	Contact Person	Amount for Goods & Services	Type Goods & Services
--------------------------------------	-------------------	--------------------------------	--------------------------

OFFEROR CERTIFIES THAT IT () IS, () IS NOT A SMALL BUSINESS CONCERN

OFFEROR: _____
RFP # _____

**CONTRACTS WITH WOMEN'S BUSINESSES ENTERPRISES / WOMEN-OWNED
BUSINESSES**

PERIOD:

From _____ To _____

% Total Co.
Expenditures

Firm Name, Address & Phone Number	Contact Person	Amount for Goods & Services	Type Goods & Services
--------------------------------------	-------------------	--------------------------------	--------------------------

OFFEROR CERTIFIES THAT IT () IS, () IS NOT A WOMEN'S OWNED BUSINESS

OFFEROR: _____

RFP # _____

**PLANNED INVOLVEMENT OF WOMEN-OWNED BUSINESSES IN PERFORMANCE OF
THIS CONTRACT**

<u>Firm Name, Address & Phone Number</u>	<u>Contact Person</u>	<u>Amount for Goods & Services</u>	<u>Type Goods & Services</u>
--	---------------------------	--	--------------------------------------

OFFEROR CERTIFIES THAT IT () IS, () IS NOT A WOMEN'S BUSINESS CONCERN

OFFEROR:_____

RFP #_____

CONTRACTS WITH BUSINESSES OWNED BY MINORITIES

PERIOD:

From _____ To _____

% Total Co.
Expenditures

<u>Firm Name, Address/ Phone Number</u>	<u>Contact Person</u>	<u>Amount for Goods & Services</u>	<u>Type of Goods & Ser.</u>
---	---------------------------	--	-------------------------------------

OFFEROR CERTIFIES THAT IT () IS, () IS NOT A MINORITY BUSINESS:

OFFEROR: _____ RFP#

**PLANNED INVOLVEMENT OF MINORITY-OWNED BUSINESSES IN PERFORMANCE
OF THIS CONTRACT**

Firm Name, Address & Phone Number	Contact Person	Amount for Goods & <u>Services</u>	Type Goods/ <u>Service</u>
--------------------------------------	-------------------	--	----------------------------------

***OFFEROR CERTIFIES THAT IT () IS, () IS NOT A MINORITY-OWNED
BUSINESS***

OFFEROR:_____

RFP#:_____

APPENDIX C DEFINITIONS

Since different vendors use different terms for the same concept, and the same term for different concepts, definitions are provided here to clarify what is meant by various terms in this document.

ATL	Automatic Tape Library; the combination of hardware and software that provide tape automation, or tape robotics, including (but not limited to) robot(s), storage slots, tape automation control software, and any necessary data paths. It does <u>not</u> include tape drives serviced by the robot(s), even though they would be attached to the ATL.
Cache	DASD where virtual tape datasets reside until they are destaged or deleted
Conflict out	An ATL mount request for a specific volume that does not reside in the ATL at the time of the mount request. To satisfy a conflict out, an operator must locate the specific volume and insert it into the ATL.
Destage	To copy or move one or more virtual tape datasets from cache to stacked physical tape, whose data format may be proprietary (unreadable through MVS)
Destructive destaging	Destaging one or more virtual tape datasets by moving (not copying), so that the datasets are no longer in cache, and exist only on destage tape(s)
Dismount	The act of removing a cartridge from a tape drive and returning it to a storage slot.
Eject	The act of moving a cartridge out of an ATL, from inside the ATL, so that it becomes accessible to the tape librarian(s).
Export	To move one or more virtual tape datasets either from cache or from destage tape to a physical tape that is in a non-proprietary format (readable through MVS)
Exchange	A mount plus a dismount.
GB	Gigabytes; 1 GB = 1,000,000,000 bytes = 1,000 MB
Insert	The act of moving a cartridge into an ATL, from outside the ATL, so that it becomes accessible to the robot(s).
MB	Megabytes; 1 MB = 1,000,000 bytes
Mount	The act of retrieving a cartridge from an ATL slot and inserting it into a tape drive, so that it becomes available for input/output operations.

Non-destructive destaging	Destaging one or more virtual tape datasets by copying (not moving), so that the datasets are still in cache, available for read hits
Read hit	A virtual tape input mount that is satisfied from the cache, i.e., without a recall
Read miss	A virtual tape input mount that requires a recall
Recall	To copy or move one or more virtual tape datasets from destage tape to cache
Recycle	To consolidate multiple sparsely occupied destage tapes into a smaller number of nearly full destage tapes, thus freeing the input tapes for reuse
Robot	A mechanism in an ATL that moves cartridges from one point to another within the ATL.
Robotic hand	A gripping mechanism, part of a robot, that holds a cartridge while the robot moves within the ATL. A robot may have one, or more than one, robotic hand.
Shift	DIT work schedules of eight-hour periods from 8 am to 4 pm, 4 pm to 12 pm and 12 pm to 8 am
Slot	A storage location in an ATL, for one tape cartridge.
VTs	Virtual Tape System; the combination of hardware and software that provides virtual tape functions, including (but not limited to) virtual tape processor and control software, cache, and any necessary data paths. A VTS does not necessarily include a hardware virtual tape library (VTL); it may be software-based, in which case the “virtual tape processor” is the mainframe processor and would not be included in this procurement. The VTS does not include the physical tape drives used for destaging, even though they are essential for virtual tape operation.
Write hit	A virtual tape scratch output mount; or a virtual tape specific output mount (for a specific virtual tape volume serial number) that is satisfied from the cache, i.e., without a recall
Write miss	A virtual tape specific output mount that requires a recall

APPENDIX D Performance Model Rules

D-1 Workload Model To Determine Capacity

- a) The proposed solution must be configured and sized to accommodate the current DIT MVS virtual and physical tape workload. Exceptions are that (1) the current round (3420) and 3480 mounts and volumes can be ignored, since they will continue to use the same equipment they currently use, (2) the number of standalone 3490E tape drives and controllers is specified, (3) minimum quantities are specified for some items.
- b) It will be the vendor's responsibility to model this workload, using data to be provided.
- c) The requirement to accommodate the current workload, plus 10%, includes a requirement to maintain the current schedule. It is not acceptable to cause any scheduled application to finish later than it is currently being finished. The Acceptance Test (4.13) describes the specific criteria that will be used to evaluate compliance with this requirement.
- d) The data provided will consist of two tape sets:
 - Tape Set 1, one dataset, possibly multi-volume, DSN=SYSCP.DIT.SMF. This will contain SMF data covering the 45-day period February 11 through March 27. (Vendors who use fewer than 45 days are advised to use the latest dates from the data provided, not the earliest.) The SMF data will include SMF record types 4 (Step termination), 14 (Input dataset activity), 15 (Output dataset activity), 21 (Error statistics by volume), 30 (Common address space work), 70 (RMF), 74 (RMF), and 221 (HSM FSR). It would have also included SMF record types 5 (Job termination), 34 (TS-step termination), 35 (Logoff), and 40 (Dynamic DD), but these are not recorded at DIT.
 - Tape Set 2, six files, all on one volume.
 - o DSN=SYSCP.DIT.TMC. A copy of the CA-1 Tape Management Catalog (TMC), as of the last day of the 45-day period.
 - o DSN=SYSCP.DIT.VAULT. A copy of the Vault Pattern list as of the same date.
 - o DSN=SYSCP.DIT.DSNROUND. A list of generic dataset names representing those tape datasets that currently use round tape, and will continue to do so.

- o DSN=SYSCP.DIT.DSN18TRK. A list of generic dataset names representing those tape datasets that currently use 18-track tape, and will continue to do so.
 - o DSN=SYSCP.DIT.DSN36TRK. A list of generic dataset names representing those tape datasets that will go to 36-track tape after the new tape hardware and software have been put into production.
 - o DSN=SYSCP.DIT.DSNHICAP. A list of generic dataset names representing those tape datasets that will go to high-capacity tape (3590 or 9840) after the new tape hardware and software have been put into production.
- e) The SMF and TMC data should be used as a representation of DIT's current workload, and the workload at the time that the newly procured tape hardware and software are put into production. Each tape dataset created in this workload should be assumed to be created on a particular tape device type (round, 18-track, 36-track, high-capacity, or virtual). Either of two methods for doing this may be used.

Method 1

Use the four lists of generic dataset names (DSNs) (the last four files on Tape Set 2). In these DSNs, '?' represents any one character, '*' represents any number of any characters, and '**' at the end of a DSN represents any number of any characters. A DSN ending in '.G????V??' is a Generation Data Group (GDG).

Any output tape mount with a DSN matching any entry in SYSCP.DIT.DSNROUND will use round tape (3420), and any that matches any entry in SYSCP.DIT.DSN18TRK will use 18-track tape (3480). These may be ignored in the analysis, since the hardware they will use already exists, and will not be changed.

Any output mount with a DSN matching any entry in SYSCP.DIT.DSN36TRK will use 36-track tape (3490E). These datasets will use the standalone 36-track tape drives to be provided as part of this procurement. (As a general rule, these will be datasets that go offsite and are too small to take advantage of high-capacity tape.)

Any output mount with a DSN matching any entry in SYSCP.DIT.DSNHICAP will use high-capacity tape (3590 or 9840). These datasets will use the high-capacity tape drives attached to the ATL to be provided as part of this procurement. (As a general rule, these will be datasets that are too large for virtual tape, or that go offsite and are large enough to take advantage of high-capacity tape.) Datasets with DSN starting with 'SYSHSM' are HSM datasets that can be assumed to take advantage of high-capacity tape, resulting in a substantial reduction in volumes, even though they are not

currently multi-volume. For all other datasets, assume no stacking other than what already exists

Destage tapes created by the virtual tape system to be provided as part of this procurement will of course also use the high-capacity tape drives; destage tapes are not represented in the SMF and TMC data provided, partly because no destaging is being done with the existing virtual tape system. Nevertheless, the vendor analysis must account for destage tapes created and used by the new virtual tape system.

Any output mount with a DSN not matching any entry in SYSCP.DIT.DSNROUND, SYSCP.DIT.DSN18TRK, SYSCP.DIT.DSN36TRK, or SYSCP.DIT.DSNHICAP will use virtual tape. These datasets will use the virtual tape system to be provided as part of this procurement. (As a general rule, these will be datasets that do not go offsite, and are not extremely large. Any gross exceptions to this encountered in the SMF/TMC data should be brought to DIT's attention.)

Method 2

As an alternative to the lists of generic DSNs, the following rules may be used to determine which device type to assign each dataset to for the purpose of the workload analysis. It is recommended that generic dataset names be used. A suggested list of generic dataset names can be compiled by extracting all of the entries containing '?' or '*' in SYSCP.DIT.DSNROUND, SYSCP.DIT.DSN18TRK, SYSCP.DIT.DSN36TRK, and SYSCP.DIT.DSNHICAP.

1. Datasets currently going to round tape will continue to do so.
2. Datasets currently going to 18-track tape will continue to do so.
3. Datasets currently going to virtual tape will continue to do so.
4. Datasets currently going to 36-track tape with DSN =
SYSOS.DUMP.**
will go to virtual tape.
5. Datasets currently going to 36-track tape with DSN =
SYSHSM.BACKTAPE.**
SYSHSM.COPY.BACKTAPE**
SYSHSM.COPY.HMIGTAPE.**
SYSHSM.DMP.ML1DUMP.**
SYSHSM.DMP.PRIMWEEK.**
SYSHSM.DMP.PRIVALT.**
SYSHSM.HMIGTAPE.**
SYSOS.BACKUP.?????.G????V??

SYSOS.OFFSITE.**

will go to high-capacity tape. The SYSHSM datasets will tend to take advantage of the available volume size. The SYSOS datasets (FDR backups) will not be stacked (until much later), so at best what is currently a multi-volume 36-track dataset will occupy a single high-capacity volume.

6. For other datasets currently going to 36-track tape, it is necessary to determine if the dataset goes offsite, and the average size in volumes per set.
 - a. Offsite datasets with less than 2.0 volumes per set will continue to go to 36-track tape.
 - b. Offsite datasets with 2.0 or more volumes per set will go to high-capacity tape.
 - c. Non-offsite datasets with less than 4.0 volumes per set will go to virtual tape.
 - d. Non-offsite datasets with 4.0 or more volumes per set will go to high-capacity tape.

(The threshold is lower for offsite datasets because vaulting expenses affect the trade-off.)

- f) The following additional information about the DIT data center is provided to assist with interpretation of the SMF and TMC data.

Tape

- There are 4 round tape drives, 4 18-track tape drives, 48 36-track tape drives, and 32 virtual tape drives.
 - o Device addresses 0360-0363 are round tape (3420) (Memorex 3228).
 - o Device addresses 0CC0-0CC3 are 18-track tape (IBM 3480-B22).
 - o Device addresses 0C20-0C27, 0C30-0C37, 0C40-0C47, 0C98-0C9F, 0CA8-0CAF, and 0CB8-0CBF are 36-track (Sutmyn 5498, attached to Sutmyn ATL).
 - o Device addresses 0C70-0C8F are virtual tape (Sutmyn VTL).
- Tape volume serial numbers 1xxxxx and 2xxxxx are round tape reels.

- Tape volume serial numbers 5xxxxx and 6xxxxx are 3480 and 3490 cartridges. Standard-length (550 feet), double-length (1,100 feet), and a few 1.5x-length (800 feet) cartridges are mixed in this volser range. Double-length cartridges can be identified in the TMC volume record by TRTCH=x'E1', and the rest may be assumed to be standard-length.
- Tape volume serial numbers 8xxxxx are virtual tape volumes.

Processors

- LPARs 1, 5, and 6 run on an Amdahl Millennium GS795 (546 MIPS, 5.0 GB combined central and expanded storage, 16 parallel, 96 ESCON channel paths)
- LPARs 2, 3, and 4 run on an HDS Skyline 425 (438 MIPS, 3.5 GB combined central and expanded storage, 16 parallel, 72 ESCON channel paths)

DASD

- There are 216 3390-1 DASD volumes and 935 3390-3 volumes, for a total of 2,856,030 MB.
- The DASD subsystems are:
 - o AMD SP200 (363 GB DASD, 2 GB cache, 12 ESCON host adapters, addresses 0Dxx)
 - o AMD SP200 (363 GB DASD, 2 GB cache, 12 ESCON host adapters, addresses 0Fxx)
 - o AMD SP200 (454 GB DASD, 2 GB cache, 12 ESCON host adapters, addresses 05xx)
 - o AMD SP/400 (715 GB DASD, 12 GB cache, 12 ESCON host adapters, addresses 3xxx)
 - o HDS 7700E (961 GB DASD, 13 GB cache, 12 ESCON host adapters, addresses 04xx, 0Bxx, 4xxx)
- g) The following is the list of overnight batch tape jobs with specific completion time targets, to be used in conjunction with the acceptance test as described in 4.13.b.2.

SYSTEM IDENTIFIER	JOB IDENTIFICATION	COMPLETION
		TIME TARGET
SYS1	COMINFBK	1 : 21
SYS1	MISABABK	5 : 51

SYS1	MISABAC1	4:48
SYS1	MISABAC2	5:01
SYS1	MISABAC3	5:09
SYS1	MISABPRD	5:47
SYS1	MISABTST	5:13
SYS1	MISADAD1	3:47
SYS1	MISADAW1	4:58
SYS1	MISDB2DA	5:53
SYS1	MISDSDDM	6:46
SYS1	MISIMFP1	3:59
SYS1	MISIMFP3	1:59
SYS1	MISIMFT	1:50
SYS1	MISMVSDA	5:21
SYS1	MISROSDA	5:01
SYS1	MISUPD01	7:26
SYS1	MISUPD04	5:19
SYS1	MISUPD05	5:27
SYS1	MISUPD09	4:59
SYS1	SYSAC3P	1:27
SYS1	SYSADBK3	7:07
SYS1	SYSADBK4	1:43
SYS1	SYSADBK7	5:34
SYS1	SYSADBK8	5:28
SYS1	SYSBKP7B	6:33
SYS1	SYSCMPB1	1:03
SYS1	SYSCPTPN	1:26
SYS1	SYSDAMI1	6:40
SYS1	SYSDSN	6:32
SYS1	SYSIMSBP	4:17
SYS1	SYSINFBK	0:30
SYS1	SYSJACM	6:37
SYS1	SYSLIST2	0:54
SYS1	SYSLMCDB	1:40
SYS1	SYSLMSCR	0:45
SYS1	SYSLOGR	1:52
SYS1	SYSMCBAC	6:45
SYS1	SYSMCMON	6:32
SYS1	SYSMCPRM	5:24
SYS1	SYSMCWEE	4:59
SYS1	SYSMHBAC	1:25
SYS1	SYSMHMON	1:24
SYS1	SYSMHWEE	1:09
SYS1	SYSMNBAC	2:06
SYS1	SYSMNMON	1:32
SYS1	SYSMNWEE	1:39
SYS1	SYSMVBAC	0:44
SYS1	SYSMVMON	0:55
SYS1	SYSMVWEE	0:35
SYS1	SYSMXBAC	6:26
SYS1	SYSMXDAR	6:39
SYS1	SYSMXWEE	5:18
SYS1	SYSMXWER	6:09
SYS1	SYSO003A	2:54
SYS1	SYSO003B	4:50

SYS1	SYSPAHCP	1:15
SYS1	SYSPAHCT	0:42
SYS1	SYSPAHPW	6:39
SYS1	SYSPAHP1	6:41
SYS1	SYSPAHT1	6:37
SYS1	SYSRPDP	5:39
SYS1	SYSROSBUS	4:51
SYS1	SYSROSRE	4:54
SYS1	SYSSCXP	4:45
SYS1	SYSTMCBK	6:25
SYS1	SYSTPDLY	6:23
SYS1	SYSTSTP	0:50
SYS1	TAXPAC05	1:37
SYS1	TAXPAC2A	0:26
SYS1	TAXPAC2B	1:29
SYS1	TAXPAC2C	0:37
SYS1	TAXPAC2D	0:45
SYS1	TAXPAC3B	21:47
SYS1	TAXPAC4B	1:23
SYS1	TAXPAD02	21:33
SYS1	TAXPAI04	1:59
SYS1	TAXPAI05	2:13
SYS1	TAXPAI1A	1:04
SYS1	TAXPAI1B	1:19
SYS1	TAXPAI2A	1:35
SYS1	TAXPAI2B	1:59
SYS1	TAXPAI2C	1:42
SYS1	TAXPAI4B	2:05
SYS1	TAXPAR01	0:46
SYS1	TAXPAR13	21:26
SYS1	TAXPAR30	21:32
SYS1	TAXPAR32	23:52
SYS1	TAXPAR39	1:25
SYS1	TAXPAR7E	2:14
SYS1	TAXPAR71	0:47
SYS1	TAXPAU04	1:24
SYS1	TAXPBR08	21:50
SYS1	TAXPBS03	21:34
SYS1	TAXPBS04	1:37
SYS1	TAXPBS05	23:29
SYS1	TAXPBS06	23:37
SYS1	TAXPBS07	23:39
SYS1	TAXPBS08	23:42
SYS1	TAXPBS09	21:40
SYS1	TAXPBS19	21:36
SYS1	TAXPBT05	21:46
SYS1	TAXPBT10	23:58
SYS1	TAXPBT12	21:37
SYS1	TAXPBT13	0:25
SYS1	TAXPBT33	1:06
SYS1	TAXPBT37	23:53
SYS1	TAXPBT39	1:25
SYS1	TAXPBT43	23:53
SYS1	TAXPBT57	21:36

SYS1	TAXPBT9B	0:08
SYS1	TAXPBT99	22:20
SYS1	TAXPC011	18:55
SYS1	TAXPC012	18:57
SYS1	TAXPC013	19:03
SYS1	TAXPC014	18:58
SYS1	TAXPC015	19:00
SYS1	TAXPC016	19:05
SYS1	TAXPC017	18:51
SYS1	TAXPC018	18:53
SYS1	TAXPC040	18:58
SYS1	TAXPC044	19:01
SYS1	TAXPE011	20:51
SYS1	TAXPE017	20:54
SYS1	TAXPE040	20:30
SYS1	TAXPE430	1:22
SYS1	TAXPFF62	21:20
SYS1	TAXPIC13	21:46
SYS1	TAXPIF02	21:10
SYS1	TAXPIF03	1:19
SYS1	TAXPIF04	21:31
SYS1	TAXPIF05	1:26
SYS1	TAXPIF06	21:23
SYS1	TAXPII01	4:21
SYS1	TAXPIM06	21:44
SYS1	TAXPIM13	0:25
SYS1	TAXPIM14	0:24
SYS1	TAXPIM18	0:38
SYS1	TAXPIM2A	1:49
SYS1	TAXPIM2B	1:50
SYS1	TAXPIM27	1:26
SYS1	TAXPIM32	0:52
SYS1	TAXPIN10	21:45
SYS1	TAXPIN11	21:42
SYS1	TAXPIN12	22:17
SYS1	TAXPIN13	21:37
SYS1	TAXPIN15	1:58
SYS1	TAXPIN19	1:09
SYS1	TAXPIN20	1:46
SYS1	TAXPIN22	1:55
SYS1	TAXPIN27	2:27
SYS1	TAXPIN28	1:07
SYS1	TAXPIN29	21:57
SYS1	TAXPIN30	1:55
SYS1	TAXPIN32	3:43
SYS1	TAXPIN33	2:01
SYS1	TAXPIT0B	21:16
SYS1	TAXPIT05	23:05
SYS1	TAXPIT06	21:37
SYS1	TAXPNS01	5:45
SYS1	TAXPNS06	5:12
SYS1	TAXPNS07	5:12
SYS1	TAXPNS50	1:22
SYS1	TAXPRG02	21:42

SYS1	TAXPRG07	22:00
SYS1	TAXPRI01	1:50
SYS1	TAXPRI20	2:00
SYS1	TAXPRI39	6:15
SYS1	TAXPRI45	21:43
SYS1	TAXPRI46	5:05
SYS1	TAXPRI47	23:12
SYS1	TAXPRI50	2:04
SYS1	TAXPRI52	21:45
SYS1	TAXPRI58	2:02
SYS1	TAXPRI59	1:48
SYS1	TAXPTF01	2:57
SYS1	TAXPTF02	3:27
SYS1	TAXPTR13	21:33
SYS1	WELBKLRH	21:24
SYS1	WELBKLRP	21:52
SYS1	WELBKLRS	21:23
SYS1	WELBKLRT	21:27
SYS1	WELPA11	0:26
SYS1	WELPA8	0:24
SYS1	WELRA1	1:20
SYS1	WELRA10	1:56
SYS1	WELRC20	19:04
SYS1	WELUA5	0:20
SYS1	WELUA7	0:21
SYS1	WELUC3	19:50
SYS1	WELUO14	22:24
SYS2	DMVDD005	0:51
SYS2	DMVDD006	7:16
SYS2	DMVDD008	7:22
SYS2	DMVDD016	7:50
SYS2	DMVDD021	7:23
SYS2	DMVDD022	1:01
SYS2	DMVDD024	1:26
SYS2	DMVDD025	1:05
SYS2	DMVDD030	2:35
SYS2	DMVDD031	4:44
SYS2	DMVDD032	2:23
SYS2	DMVDD033	2:25
SYS2	DMVDD034	3:14
SYS2	DMVDD035	2:42
SYS2	DMVDD040	0:20
SYS2	DMVDD050	0:02
SYS2	DMVDD054	7:48
SYS2	DMVDD100	1:34
SYS2	DMVDD101	1:36
SYS2	DMVDD102	1:37
SYS2	DMVDD103	1:05
SYS2	DMVDD104	1:45
SYS2	DMVDD106	1:18
SYS2	DMVDD107	1:18
SYS2	DMVDD120	0:57
SYS2	DMVDD121	1:20
SYS2	DMVDD123	1:39

SYS2	DMVDD203	7:03
SYS2	DMVDD220	1:18
SYS2	DMVDD304	1:49
SYS2	DMVDD339	22:11
SYS2	DMVDD501	1:06
SYS2	DMVDD502	1:08
SYS2	DMVDD504	1:09
SYS2	DMVDD507	1:10
SYS2	DMVDM122	3:10
SYS2	DMVDW001	1:43
SYS2	DMVMD007	18:35
SYS2	DMVMD270	1:54
SYS2	DMVMD275	1:54
SYS2	DMVPW700	2:45
SYS2	DMVVD029	0:32
SYS2	DMVVD260	0:14
SYS2	DMVVD310	1:32
SYS2	DMVVD330	23:59
SYS2	DMVVM055	3:28
SYS2	DMVVM097	3:47
SYS2	DMVVM098	4:22
SYS2	DMVVW230	2:45
SYS2	DMV29101	1:56
SYS2	DMV29102	1:53
SYS2	DMV29103	5:55
SYS2	DMV29113	1:04
SYS2	DMV30020	18:31
SYS2	DMV30039	18:13
SYS2	DMV30041	6:49
SYS2	DMV30081	6:50
SYS2	DMV30130	18:37
SYS2	DMV30180	22:37
SYS2	DMV30186	6:48
SYS2	DMV30187	18:16
SYS2	DMV30191	18:12
SYS2	DMV30195	21:27
SYS2	DMV40000	3:35
SYS2	DMV40016	6:23
SYS2	DMV40021	6:47
SYS2	DMV40022	6:42
SYS2	DMV40024	6:44
SYS2	DMV40025	6:35
SYS2	DMV40026	6:26
SYS2	DMV40027	7:09
SYS2	DMV40028	7:09
SYS2	DMV40029	6:49
SYS2	DMV40030	7:00
SYS2	DMV40031	6:49
SYS2	DMV90000	2:49
SYS2	DMV90001	5:22
SYS2	DMV90002	5:57
SYS2	DMV90004	2:38
SYS2	DMV90006	1:13
SYS2	DMV90011	5:01

SYS2	DMV90012	23:02
SYS2	DMV90013	3:49
SYS2	DMV90014	6:03
SYS2	DMV90018	6:07
SYS2	DMV90019	1:35
SYS2	DMV90020	6:13
SYS2	DMV90021	6:35
SYS2	DMV90023	19:22
SYS2	DMV90027	3:58
SYS2	MISCICDA	6:53
SYS2	SYSCMPB2	1:06
SYS2	SYSDMRP	4:14
SYS2	SYSHWBP	1:03
SYS2	SYSHWDP	0:54
SYS2	SYSHWTP	4:32
SYS2	SYSHWYP	3:35
SYS2	SYSPAHPH	6:38
SYS2	SYSPAHPV	6:38
SYS2	SYSPAHT2	6:38
SYS2	VECDP400	2:22
SYS2	VECDR100	5:06
SYS2	VECDR500	7:06
SYS2	VECDR520	6:46
SYS2	VECOR34B	0:18
SYS6	SYSARCT2	4:39
SYS6	SYSPAHTW	6:39
SYS6	SYSPAHT6	6:36

APPENDIX E Installed Program Products

<u>PRODUCT</u>	<u>RELEASE</u>	<u>VENDOR</u>
3270 PC FTP	OS390 2.7 9906+	IBM
ABENDAID/MVS	9.0.4	Compuware
ACF2	6.3 SP01	CA
APXCHANGE	201	Cardinal Sftwr
Assembler (High Level)	3	IBM
BCP & JES2	os390 2.9 May'00	IBM
C/370	V1.2.2 Runlib	IBM
C/370	V1.2.2	IBM
CA-TNG	2.2	CA
COBOLII/RW	4.09	IBM
CONTRLMANGR	2.3.0.0	Allen Systems
CSP/AD	4.1	IBM
CSP/RS	2.1	IBM
DATAMANAGER	1.9.0.0	Allen Systems
DCD III	2.4	MARBLE .
DCF-BASE PRODUCT	4	IBM
DCF-DLF FEATURE	3	IBM
DCF-TSO FEATURE	4	IBM
DITTO	3	IBM
EASYTRIEVE Plus	6.2 9904	CA
ECC	1.0.F1	
FILEAID / MVS	8.0.1	Compuware
FINALIST	7.1	Pitney Bowes
FORTTRAN / VS	2.6	IBM
HCD		9IBM
IBMCOBOL	2.1.1	IBM
Imageplus Visualinfo	1	IBM
INFO / MGT	4.2.0	IBM
IPCS	1.1.0	IBM
ISPF	4.8	IBM
LIBRARIAN	4.2 0008	CA
Multi-Image Manager	4.4 serv pac 3	CA
OGI/370	1.1.0	IBM
OPTIMIZER / II	2.0 9604	CA

<u>PRODUCT</u>	<u>RELEASE</u>	<u>VENDOR</u>
PDSFAST	5.0J	SEA
PL1	2.3.0	IBM
Page Printer Format Aid	1.1.0	IBM
PSF/MVS	2.2.0	IBM
RMS	11.33	MANTISSA
ROSCOE	6.0 9906	CA
Sas/Access to Adabas	8.1 TS1M0	SAS INC.
Sas/Access to DB2	8.1 TS1M0	SAS INC.
SAS/AF	8.1 TS1M0	SAS INC.
SAS/ASSIST	8.1 TS1M0	SAS INC.
SAS/Base	8.1 TS1M0	SAS INC.
SAS/CONNECT	8.1 TS1M0	SAS INC.
SAS/ETS	8.1 TS1M0	SAS INC.
SAS/FSP	8.1 TS1M0	SAS INC.
SAS/GRAPH	8.1 TS1M0	SAS INC.
SAS/IML	8.1 TS1M0	SAS INC.
SAS/SHARE	8.1 TS1M0	SAS INC.
SAS/STAT	8.1 TS1M0	SAS INC.
SYNCSORT	3.7CR TPF2A	SYNCSORT
SYSVIEW	7.3	CA
TELON	2.4 0006	CA
TSPRINT	4.3	TONE
Vision60	10	Sterling
Vision Results	4	Sterling
VisionPDS (Module)	N/A	Sterling
VisionTABLE (Module)	N/A	Sterling
XPEDITER / TSO	6.4	Compuware

APPENDIX F Supported Software

<u>PRODUCT</u>	<u>A.K.A</u>	<u>RELEASE</u>	<u>VENDOR</u>
ACF/NCP	NCP	7.8	IBM
ACF/NCP/SSP	SSP	4.8	IBM
ACF/VTAM	VTAM	4.8	IBM
ASSIST/GT	Assist/GT	5	GT Software
ASSIST/GT	Assist/GT	4.6.4	GT Software
BIM-VSHARE/MVS	BIM/VSHARE	2.5B	B.I.Moyle Associates
CICS Abend-AID/FX	Abend-Aid/FX	4.2	Compuware, Corp.
CICS TS (Transaction Server)	CICS	1.3	IBM
Connect Direct	Connect Direct	3.2	Sterling Commerce
Connect Mailbox	Connect Mailbox	3.2	Sterling Commerce
DADS Plus	DADS	3.5	CA
ENTERPRISE Print Services	EPS	5.2	CA

<u>PRODUCT</u>	<u>A.K.A</u>	<u>RELEASE</u>	<u>VENDOR</u>
EP	EP	1.14	IBM
FINALIST	Finalist	7.2	Pitney Bowes
FTP - this is a subset of SNS/TCP Access	FTP	5.2	CA
GENTRAN	Gentran	6.0 Version	CA
IBM	TCP IP Stack		IBM
NETSPY	Netspy	5.2	CA
NETVIEW / TME 10	Netview	1.3	IBM
	PK Zip MVS	2.51	Ascent
NetworkIt TCPaccess	TCPaccess	5.2	CA
NTUNEMON	Ntunemon	2.6	IBM
Omegamon		n/a	
SNS/HOTWRITER	SNS Hotwriter	1.4	CA

<u>PRODUCT</u>	<u>A.K.A</u>	<u>RELEASE</u>	<u>VENDOR</u>
SNS/SNA GATEWAY	SNS SNA Gateway	1.4	CA
ULTRAOPT/CICS	Ultraopt CICS	4.0.01	BMC Software
ULTRAOPT/IMS	Ultraopt IMS	4.0.01	BMC Software
XPEDITER / CICS	XPEDITER	7.2	Compuware, Corp.

APPENDIX G VENDOR REFERENCE FORM

REQUEST FOR PROPOSAL 2001-25

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF INFORMATION TECHNOLOGY**

VENDOR CLIENT REFERENCE FORM

Vendor Name:_____

CLIENT

Name of Firm:_____

Address:_____

Telephone Number of Contact:_____